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FOR THE SESSION 1923-24

MONTREAL:
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Announcement of the Department of Pharmacy.

Announcement of the School for Graduate Nurses.

Announcement of the School for Social Workers.

Announcement of the School of Physical Education.

The Annual Report.

INDEX

	PAGE
Academic Dress	120
Academic Year	35
Accountancy, Courses in	192
Accounting	254
Administrative Officers	3
Admission	50
To the Course in Pharmacy	323
To Macdonald College	491
To the Practice of Dentistry	348
To the Study and Practice of Law in Quebec	343
To the Practice of Pharmacy	328
To the Royal Victoria College	179
To the School for Graduate Nurses	477
To the School for Social Workers	465
To the Study and Practice of Medicine	280
Advisers	123
Affiliated Colleges	44, 45
Age for Admission	73
Agency	340
Agriculture, Faculty of	47, 491
Agronomy, Graduate Courses in	439
Algebra for Matriculation	60, 63, 72
Courses in (Arts)	161
" (Applied Science)	249
Anatomy	293, 357
" Dental	359
" Graduate Courses in	428
Applied Mechanics, Courses in	237
Applied Science, Faculty of	201
Architecture:—	
Course in	204
Subject of	227
Arithmetic for Matriculation	56
Arts, Faculty of	122
Assaying, Courses in	258, 259
Associations	570
Athletic Association, University	118
Athletics	117
Attendance, Rules regarding	77
B.A. Degree, Courses for	122, 126
Bachelor of Architecture, Requirements for	204
Bachelor of Civil Law	334
Bachelor of Commerce, Course for	187
Bachelor of Household Science	133, 493
Bachelor of Laws, Course of	333
Bachelor of Music	370
Bachelor of Science Degree, Courses for, in Arts	129, 131
" " " " " " " Applied Science	207
Bachelor of Science in Medicine	287
Bachelor of Science in Agriculture	47, 493
Bacteriology	300, 360
" Graduate Courses in	426
Bankruptcy	339
Bar Regulations, Province of Quebec	343

178196

	PAGE
Bio-Chemistry	298
Bio-Chemistry (Graduate Courses in)	422
Biology for Matriculation	70
Biology, Courses in	140, 177, 290, 355
Board of Governors	1
Their Powers	43
Board and Residence	78
In Macdonald College	492
In Royal Victoria College for Women	181
Botany:—	
Course in Arts	140
" " Dentistry	327
" " Medicine	355
" " the Graduate School	423
" For Matriculation	66
Buildings	494
Bursaries (Tutorial) in Applied Science	92
Business Organization, Course in	194
Calendar of Meetings, etc	35
Canadian Officers' Training Corps	447
Carriers, Law of	342
Caution Money	103–109
Certificates accepted for Matriculation	51
Chemical Engineering, Course in	209
Chemistry:—	
For Matriculation	66, 70
In the Faculty of Graduate Studies	419, 422
In the School of Commerce	195
Subject of (Arts)	141
" " (Applied Science)	233
" " (Dentistry)	356
" " (Medicine)	291
" " (Pharmacy)	326
Civil Engineering:—	
Course in	211
Graduate Courses in	434
Subject of	237
Civil Procedure, Courses in	338
Classes of Students	74
Classics, Courses in	144, 408
Clinical Instruction in Dentistry	364
Clinical Instruction in Medicine	314
Clinical Microscopy	305
Closing Date for Session	72
Clubs	570
College Grounds, Management of	117
Commerce, School of	187
Commercial Law	194, 338
Committees of Governors and Corporation	4
Company Law	341
Conduct of Students	115
Congregational College	45
Conservatorium of Music	367
Constitution of the University	38
Constitutional Law	341

	Page
Contracts, Law of	337
Corporation, The	1, 43
Corporations, Course in Law of	341
Cost of Education	78
Course for B.A	122, 126
For Bachelor of Commerce	187
For B.C.L	334
For B.Sc. in Applied Science	203
For B.Sc. in Arts	128–131
For D.D.S	351
For LL.B	333
For M.D., C.M	284
In the School for Graduate Nurses	474
In the School of Physical Education	450, 453
In the School for Social Workers	466
Courses of Lectures in Arts	140
" " " " Dentistry	355
" " " " Law	337
Criminal Law	337
Criminal Procedure	337
Crown and Bridge Work	361
Curriculum in Applied Science	203–222
" " Arts	122–131
" " Dentistry	351, 352
" " Law	334, 335
" " Medicine	284, 285
Dates for Session 1923-24	35
Degrees Granted by the University	46
Dental Anatomy	359
Dental Faculty	346
Dental History, Ethics and Economics	363
Dental Jurisprudence	364
Dental Metallurgy	363
Department of Physical Education	441
Dermatology	308
Descriptive Geometry	243
Diocesan College	45
Diploma for Graduate Nurses	474
Diploma of Licentiate in Accountancy	191
Diploma of Licentiate in Music	372
Diploma in Physical Education	452
Diploma in the School for Social Workers	465
Diplomas for Teaching	151
Discipline	115
Doctor of Civil Law Degree	406
Doctor of Dental Surgery	351
Doctor of Literature Degree	406
Doctor of Music Degree	370, 406
Doctor of Philosophy, Course for	404
Doctor of Science Degree	406
Domestic Relations, Law Course in	339
Dominion Dental Council	348
Dominion Registration for Medical Students	283
Double Courses:—	
Arts and Applied Science	137

	PAGE
Double Courses:—	
Arts and Commerce	139
" " Dentistry	139
" " Medicine	138, 289
" " Theology	139
Drawing, Courses in	243
Dress, Academic	120
Economic Geography	196
Economics (Graduate Courses in)	414
Economics (Undergraduate Courses)	148, 196, 249
Education, Courses in	150
Electrical Engineering:—	
Course in	213
Graduate Courses in	435
Subject of	244
Embryology	294
Engineering Courses	207
Engineering Economics	249
Engineering Institute of Canada	202
Engineering Law	249
Engineering Physics, Course in	131
Engineering Societies	202
English:—	
Courses in (Graduate)	409
Courses in (Undergraduate)	152, 244
Courses in Medicine	293
For Matriculation	56, 70
In the School of Commerce	197
Summer Reading in Applied Science	223
Entomology, Graduate Courses in	427
Entrance Examination	50
Certificates accepted for	51
Fees	52
Regulations	50
Requirements in each Subject	56
Equitable Remedies, Law of	339
Evidence, Course in	339
Examinations:—	
For Entrance	50
To Qualify as Teacher of Music	386, 388
In Applied Science	201
In Arts	135
In Dentistry	352
In Law	336
In Medicine	288
In Music	389
In Pharmacy	328
In the School of Physical Education	452
Physical	73
Exhibitions	80
Expenses of Board and Education	78
In Macdonald College	492
In the Royal Victoria College	181
Faculties	46

PAGE

Faculty of Applied Science ... 201
Of Agriculture ... 490
Of Arts ... 122
Of Dentistry ... 346
Of Graduate Studies and Research ... 397
Of Law ... 331
Of Medicine ... 279
Of Music ... 367

Fees ... 101
Fellows of the University ... 1, 43
Fellowships in the Faculty of Graduate Studies and Research ... 398
Fellowships in Applied Science ... 92, 263
Fellowships in Medicine ... 95

Field Schools:—
In Geodesy ... 269
In Mining ... 264
In Surveying ... 269

Fire Assaying ... 258, 259
Foundation of the University ... 38
Of the Faculty of Medicine ... 279
Of Macdonald College ... 490
Of the Royal Victoria College ... 178

Freehand Drawing, Courses in ... 243

French:—
Courses in (Graduate) ... 411
Courses in (Undergraduate) ... 172
For Matriculation ... 58, 70

Geodesy ... 267
Geography (Economic), Course in ... 196
Geology (Graduate Courses) ... 432
Geology (Undergraduate Courses) ... 154, 247

Geometry:—
Courses in ... 161, 360
Descriptive ... 243
For Matriculation ... 60, 64, 72

German:—
Courses in ... 156, 412
For Matriculation ... 58, 71

Government of the University ... 43
Governors, Board of ... 1, 43
Gowns ... 120
Graduate Courses in Medicine ... 317
Graduate Nurses, School for ... 473
Graduate Studies and Research (Faculty of) ... 397

Greek:—
Courses in (Graduate) ... 408
Courses in (Undergraduate) ... 144
For Matriculation ... 57, 71

Grounds, Management of ... 117
Gynæcology ... 312
Health of Students ... 73
Hebrew ... 164
Highway Engineering ... 240

	PAGE
Histology	294
Historical Calendar	39
History (Undergraduate Courses)	159
For Matriculation	56, 71
Graduate Courses	413
Of the Faculty of Dentistry	346
Of the Faculty of Law	331
Of the Faculty of Medicine	279
Of Macdonald College	490
Of the Royal Victoria College	178
Of the University	38
History of Medicine	308
Honour Courses for B.A.	126
For B.Sc. in Arts	131
Hoods	120
Hospitals	315
Household Science	493
Hygiene	302
" Graduate Courses	317
Immovable Property	338
Immunology	305
Incorporated Colleges	44
Insurance, Law of	341
International Law, Courses in	338, 340
Italian for Matriculation	59
Junior Matriculation	50
Jurisprudence	337
Laboratories	501
Latin:—	
Courses in (Graduate)	408
Courses in (Undergraduate)	146
For Matriculation	57, 71
Law for Engineers	249
Law, Faculty of	331
Law, Graduate Courses in	415
Lease and Hire, Law of	340
Lectures in Law	337
Legal Draftsmanship	338
Legal History, Course in	338
Library, The University	486
Library, Dental	366
Library Fees	489
Library, Law	333
Library, Medical	321
License Requirements in Medicine	283
Licentiate in Accountancy	191
Licentiate in Music, Diploma of	372
Licentiate in Pharmacy	329
Limited Undergraduates	135
LL.B. Degree	333
LL.M. Degree	401
Loan Funds	93
Local Centre Examinations in Music	389
Logic	165
Macdonald College	490

PAGE

Marriage Covenants, Course in Law of 338
Master of Arts Degree 400
Master of Laws Degree 401
Master of Science Degree 402
Master of Science in Agriculture Degree 403
Materia Medica 327, 358, 360
Mathematics (Graduate Courses) 416
Mathematics, Courses in Arts (Undergraduate) 161
  Applied Science 249
  For Matriculation 60, 63, 72
  In the School of Commerce 195
Matriculation Examination 50
  For Junior Matriculation 50
  For Senior Matriculation 69
M.D. Degree, Requirements for 286
Mechanical Engineering:—
  Courses in 215
  Graduate Courses in 436
  Subject of 251
Mechanics 238
Medals 80
Medical Council Registrars 280
Medical Inspectors of Schools, Course for 319
Medical Jurisprudence 303
Medical Society 203
Medicine, Course in 303
Medicine, Faculty of 279
Metallurgical Engineering:—
  Course in 217
  Graduate Courses in 436
  Subject of 257
Metallurgy (Dental) 363
Microscopy, Course in 305
Military Training 447
Mill Buildings 239
Mineralogy 154, 247, 432
Mining Engineering:—
  Course in 219
  Graduate Courses in 437
  Subject of 260
Mining Summer School 264
Morals, Regulations re 115
Municipal Law 342
Mus. Bac. Degree 370, 406
Mus. Doc. Degree 370
Museums 515
Music, Course in Arts 163
Music, Faculty of 367
Negotiable Instruments 339
Neurology 306
Notarial Law 340
Nurses, School for 473
Obligations, Course in Law of 337
Obstetrics 311
Officers of Instruction, etc 10

	PAGE
Officers' Training Corps	447
Operative Dentistry	362
Ophthalmology	313
Oral Surgery	359
Ordinary Course for B.A	122
Ordinary Course for B.Sc	129
Oriental Languages	164, 408
Orthodontia	361
Orthopædic Surgery	310
Oto-Laryngology	313
Parasitology	300
Partial Students	74, 135
Partnership	340
Pathological Chemistry	298
Pathology	299, 360
Pediatrics	307
Persons, Course in Law of	338
Pharmacology	301, 358
" (Graduate Courses)	430
Pharmacy Department	323
Pharmacy, Subject of	326, 358
Ph.D. Degree, Requirements for	404
Philosophy (Graduate Courses)	413
" (Undergraduate Courses)	165
Physical Education	167, 441
McGill School of	449
Physical Examination	73
Physical Geography	66
Physics:—	
Courses in Arts	168
" " Applied Science	266
" " Dentistry	356
" " Medicine	292
" " the Graduate School	417
For Matriculation	66, 72
In the School of Commerce	194
Physiology	295, 358
" (Graduate Courses)	429
Political Economy	148, 414
Political Science	148, 414
Poultry Husbandry, Graduate Course in	440
Prerequisite Subjects in Applied Science	270
" " " Arts	125
Presbyterian College	45
Principal, The	1, 43
Prizes in Arts	89
In Applied Science	92
In Dentistry	97
In Gymnastics	445
In Law	96
In Medicine	94
In the School of Physical Education	452
Procedure and Pleading	339
Professors, List of	10
Promotion in Arts, Rules re	136

	Page
Prosthetic Dentistry	362
Prosthetic Treatment of Cleft Palate	363
Psychiatry	306
Psychology	165
Public Utilities, Law of	340
Railway Engineering	239
Real Property Law	337, 341
Register of Students	520
Registrars of Provincial Medical Councils	280
Registration (University)	75
Roman Law, Courses in	337
Romance Languages	172, 411
Royal Victoria College for Women	178
Sale, Law of	339
Scholarships	80
School for Graduate Nurses	473
School of Commerce	187
School of Physical Education	449
School for Social Workers	463
Semitic Languages	164, 408
Senior Matriculation Examination	72
Shopwork	251, 254, 256
Social Science, Course in	175
Social Workers, School for	463
Societies, Associations and Clubs, Officers of	570
Spanish	59, 199
Statistics, Course in	196
Strathcona Certificate Course	444
Strathcona Prizes for Physical Education	445
Students, Classes of	74
List of	520
Number in Attendance	568
Substitutions	339
Successions, Course in the Law of	341
Summer Essays and Reading in Applied Science	223
Summer Readings in Arts	126
Summer Schools:—	
In Applied Science	222
In Mining	264
In Surveying	269
Surgery, Course in	308
" (Oral)	359
Surveying	267
Text Books for Matriculation	56
" " in Dentistry	354
" " in Pharmacy	325
Theological Colleges, Affiliation of	45
Therapeutics	360
Time Table of Examinations in Applied Science	276
Time Tables of Examinations in Arts	184
Time Table of Lectures in Commerce	200
Time Table of Lectures in Music	396
Torts	337
Training of Teachers	152

PAGE

Trigonometry :—
Courses in 161, 250
For Matriculation 66, 72
Trusts 339, 341
Union, The McGill 78, 499
University Buildings 494
Urology, Course in 310
Vaccination 73
Wesleyan College 45
Wicksteed Medals for Physical Education 444
Wills, Law of 339
Workshops, Description of 519
Zoology:—
Course in Arts 177
" " the Graduate School 425
" " Medicine 290

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4769 Sherbrooke St., Westmount.
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Professor of Operative Dentistry.
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Assistant Professor of Surgery and Clinical Surgery.
4064 Dorchester St., Westmount.
W. W. Beattie, B.A., M.D.
Demonstrator in Pathology. 309 Stanley Street.
C. Beausoleil.
Instructor in Oboe. P.O. Box 696, Montreal, Que.
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Lecturer in Oto-Laryngology and Rhinology.
202 New Birks Building, 10 Cathcart St.

LIONEL H. HAMILTON, B.S.A.
Extension Animal Husbandman. Macdonald College.

W. F. HAMILTON, M.D.
Associate Professor of Medicine and Clinical Medicine. 287 Mountain St.

R. H. M. HARDISTY, D.S.O., M.C., B.A., M.D.
Demonstrator in Clinical Medicine. Medical Arts Building, corner Guy and Sherbrooke Sts.

JAMES HARKNESS, M.A. (Cantab.), LL.D., F.R.S.C.
Peter Redpath Professor of Pure Mathematics. 23 Lorne Ave.

EDMUND PARKER DALE HARRIS, B.A., B.C.L., M.A. (Oxford).
Lecturer in Commercial Law (School of Commerce). 189 St. James St.

F. C. HARRISON, D.Sc., F.R.S.C.
Principal of Macdonald College, Dean of the Faculty of Agriculture and Professor of Bacteriology. Macdonald College.

ROBT. ALEX. HART, D.D.S.
Superintendent of the Dental Clinic. Montreal General Hospital.

F. W. HARVEY, B.A., M.D.
University Medical Officer and Lecturer in Physio-Therapy.
4007 Dorchester St. West.

RUTH HARVEY.
Assistant Physical Director for Women. Arts Building.

W. H. HATCHER, M.Sc., Ph.D.
Assistant Professor of Chemistry. Biological Building.

N. S. HAY.
Sister-in-Charge, Physio-Therapy Department, Montreal General Hospital. School of Physical Education.

M. HAYWARD, *Instructor in Household Science.*
Macdonald College.

A. K. HAYWOOD, Superintendent, the Montreal General Hospital.
Instructor in Hospital Administration (School for Graduate Nurses).
The Montreal General Hospital.

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Instructor in Physical Training. Macdonald College.

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L. G. HEMPLE, B.S.A.
Lecturer in Charge of Dept. Agricultural Engineering.
Macdonald College.

A. T. HENDERSON, M.D.
Demonstrator in Medicine and Clinical Medicine. 386 Sherbrooke St.

JEAN T. HENDERSON, B.A.
Lecturer in Zoology. 575 Roslyn Ave.

CHARLES K. P. HENRY, M.D., F.A.C.S.
Lecturer in Surgery and Clinical Surgery.
4549 Sherbrooke St., Westmount.

FRED. G. HENRY, D.D.S., L.D.S.
Professor of Dental Pathology and Therapeutics. 444 Guy St.

VIOLET HENRY, M.Sc.
Demonstrator in Physics. 60 Arlington Ave., Westmount.

W. G. HEPBURN, M.D.
Lecturer in Anæsthetics. 614 Victoria Ave., Westmount.

D. M. HERBERT, A.T.S.C. (London).
Lecturer in Sight Singing and Part Singing. 189 Oxford Ave.

L. A. HERDT, E.E. (Elec. Inst. Montefiore, Belgium), D.Sc., F.R.S.C.
Macdonald Professor of Electrical Engineering.
22 Hampton Court Apartments

J. W. A. HICKSON, M.A., Ph.D (Halle).
Frothingham Professor of Logic and Metaphysics. 20 Ontario Ave

G. E. HODGE, M.D.
Assistant Demonstrator in Oto-Laryngology. Medical Arts Building.

S. R. N. HODGINS, B.S.A.
Instructor in Journalism. Macdonald College.

G. W. HOLDEN, M.Sc.
Demonstrator in Chemistry. Biological Building.

E. G. Hood, B.S.A., Ph.D.
Lecturer in Bacteriology. Macdonald College.

Hon. Mr. Justice E. Edwin Howard, B.A., B.C.L., K.C.
Professor of Civil Law. 372 Mountain St.

W. B. Howell, M.D.
Lecturer in Anæsthetics. 756 Sherbrooke St. W.

M. H. Howitt, B.S.A.
Lecturer in Horticulture. Macdonald College.

Walter H. Hungerford.
Instructor in Pianoforte. Conservatorium of Music.

Ethel Hurlbatt, M.A., T.C.D. (Somerville College, Oxford), Officier de l'Instruction Publique.
Warden of the Royal Victoria College and Resident Tutor in History. Royal Victoria College.

Hon. Mr. Matthew Hutchinson, D.C.L. (Retired Judge, Superior Court, Quebec).
Emeritus Professor in the Faculty of Law.
4160 Dorchester St., Westmount.

J. Alex. Hutchison, C.B.E., M.D., L.R.C.P. and S. (Edin.).
Emeritus Professor of Surgery and Clinical Surgery. 354 Mackay St.

B. L. Hyams, D.D.S.
Clinical Demonstrator in Dentistry. Birks Building.

Elizabeth A. Irwin, M.A.
Lecturer and Tutor in Classics (Royal Victoria College).
1053 Mt. Royal Blvd., Outremont.

A. Clifford Jack, D.D.S., L.D.S.
Lecturer in Dental Anatomy. 416 Mackay St.

F. Slater Jackson, M.D.
Lecturer in Embryology. Medical Building.

R. E. Jamieson, M.Sc.
Lecturer in Mathematics and Civil Engineering. Engineering Building.

R. S. Jane, B.Sc.
Demonstrator in Chemistry. Chemistry Building.

F. B. Jones, M.D., D.P.H.
Assistant Professor of Hygiene. 98 Sherbrooke St. West.

Edith M. Johnson.
Instructor in Pianoforte. 4034 Dorchester St., Westmount.

F. M. G. Johnson, M.Sc., Ph.D. (Breslau), F.I.C., F.R.S.C.
Professor of Inorganic Chemistry. Chemistry Building.

Guy Johnson, M.A., M.D., F.R.S.C. (Edin.).
Demonstrator in Anatomy, Surgery and Clinical Surgery.
453 Sherbrooke St. West.

C. R. JOYSE, M.D.
Assistant Demonstrator in Medicine and Clinical Medicine.
1967 Park Ave.

L. KASTER.
Instructor in Oboe. Conservatorium of Music.

JOSEPH KAUFMAN, M.D.
Lecturer in Medicine and Assistant Curator of the Museum. 124 Crescent St.

MARK KAUFMAN, M.D.
John McCrae Scholar.

C. B. KEENAN, D.S.O., M.D.
Lecturer in Clinical Surgery. 376 Mountain St.

ALBERT J. KELLY, B.Sc.
Assistant Professor of Surveying. Engineering Building.

LORNA KERR, B.A.
Lecturer in Story Telling. Royal Victoria College.

DAVID A. KEYS, M.A. (Toronto), Ph.D. (Harvard), Ph.D. (Cantab.).
Assistant Professor of Physics. Physics Building.

MISS L. MABEL VESSOT KING, M.A.
Lecturer in French. 148 Ste. Famille St.

LOUIS V. KING, M.A. (Cantab), D.Sc., F.R.S.C.
Macdonald Professor of Physics. 148 Ste. Famille St.

EUGENE LAFLEUR, ESQ., B.A., D.C.L., LL.D., K.C.
Emeritus Professor of International Law. 314 Peel St.

HENRY A. LAFLEUR, B.A., M.D.
Emeritus Professor of Medicine and Clinical Medicine. 215 Peel St.

PAUL T. LAFLEUR, M.A.
Molson Professor of English Language and Literature and Professor of Comparative Literature. 215 Peel St.

SINCLAIR LAIRD, M.A., B.Phil.
Dean of the School for Teachers and Professor of Education. Macdonald College.

ARTHUR S. LAMB, B.P.E., M.D.
Director of the Department of Physical Education. McGill University.

HENRY M. LAMB, M.Sc.
Associate Professor of Civil Engineering. 156 Marlowe Ave.

E. T. LAMBERT, B.A. (Lond.).
Assistant Professor of Modern Languages.
456 Mountain Ave., Westmount.

MISS YVETTE LAMONTAGNE.
Instructor in Violoncello. 91a Jeanne Mance St.

CLIFFORD E. LAMPMAN, B.S.A.
Extension Poultry Husbandman. Macdonald College.

P. LAROSE, B.Sc.
Demonstrator in Chemistry. Chemistry Building.

G. W. LATHAM, B.A. (Harvard).
Associate Professor of English. 267 Regent Ave.

STEPHEN LEACOCK, B.A. (Toronto), Ph.D. (Chicago), Litt. D. (Brown), Litt. D. (Dartmouth), LL.D. (Queen's), F.R.S.C.
William Dow Professor of Political Economy. Arts Building.

O. A. LEFEBVRE, D.D.S., L.D.S.
Clinical Demonstrator in Dentistry. 444 Guy St.

R. E. LEGG, B.Sc.
Douglas Research Fellow in Mining. Mining Building.

CHARLES STUART LEMESURIER, B.A., B.C.L.
Assistant Professor of Commercial Law
527 Lansdowne Ave., Westmount.

E. C. LEVINE, M.D.
Demonstrator in Surgery and Clinical Surgery. 271 Bishop St.

D. SCLATER LEWIS, M.Sc., M.D.
Lecturer in Medicine and Clinical Medicine and in Clinical Therapeutics. 166 Crescent St.

CLARA LICHTENSTEIN.
Associate Professor of Music, Resident Lecturer in Music (Royal Victoria College) and Vice-Director of the Conservatorium of Music. Royal Victoria College.

L. M. LINDSAY, M.D.
Demonstrator in Pediatrics. Medical Arts Building.

H. M. LITTLE, B.A., M.D., F.A.C.S.
Assistant Professor of Obstetrics and Lecturer in Gynæcology. 285 Stanley St.

FRANCIS ERNEST LLOYD, M.A. (Princeton), F.R.S.C.
Macdonald Professor of Botany and Director of the Biological Building. 771 University St.

WILLIAM LOCHHEAD, B.A., M.Sc., F.A.A.A.S.
Professor of Entomology and Zoology. Macdonald College.

A. R. B. LOCKHART, B.A.
Lecturer in Elementary Education. Macdonald College.

F. A. L. LOCKHART, M.B. (Edin.), M.D.
Clinical Professor of Gynæcology. 38 Bishop St.

E. A. LODS, B.S.A.
Extension Agronomist. Macdonald College.

J. F. LOGAN, M.A.
John McCrae Scholar and Demonstrator in Biochemistry. Biological Building.

E. LOZINSKY, M.D.
Demonstrator in Pharmacology. Biological Building.

CARLETON J. LYNDE, Ph.D.
Professor of Physics. Macdonald College.

OTTO MAASS, M.Sc., Ph.D. (Harvard), F.R.S.C.
Associate Professor of Chemistry. Chemistry Building.

A. G. MCAULEY, M.D.
Demonstrator in Ophthalmology. 621 Dorchester St. West.

A. R. MCBAIN, M.A.
Assistant in English. Arts Building.

A. B. MACALLUM, M.A., M.B., Ph.D., Sc.D., LL.D., F.R.S.
Professor of Biochemistry. Biological Building.

D. MCCALLUM, M.D.
Demonstrator in Clinical Medicine. 154 Drummond St.

J. B. MCCARTHY, B.A., D.Sc.
Assistant Professor of Chemistry. Macdonald College.

A. W. MCCLELLAND, D.D.S., L.D.S
Associate Professor of Orthodontia. 511 St. Catherine St. W.

A. H. MACCORDICK, M.D.
Demonstrator in Medicine and Clinical Medicine and in Clinical Chemistry. 131 Stanley St.

JAMES L. MCCULLOUGH.
Lecturer in Insurance. Arts Building.

L. R. MCCURDY, B.Sc.
Demonstrator in Mechanical Engineering. Engineering Building.

H. E. MACDERMOT, M.D.
Lecturer in Anatomy. Medical Arts Building, corner Guy and Sherbrooke Sts. W.

T. W. L. MACDERMOT, M.A.
Reader in History. Arts Building.

R. ST. J. MACDONALD, B.A., M.D., D.P.H.
Assistant Professor of Hygiene. Medical Building.

GORDON W. MACDOUGALL, B.A., B.C.L., K.C.
Professor of Private International Law. 68 Ontario Ave.

DUNCAN MCEACHRAN, D.V.S., V.S. (Edinburgh), F.R.C.V.S., LL.D.
Emeritus Dean and Professor in the Faculty of Comparative Medicine and Veterinary Science. Ormsby Grange, Ormstown, Que.

HUGH MCEACHRAN, L. Mus.
Instructor in Pianoforte. 505 Sherbooke St. West.

F. H. MACKAY, B.A., M.D.
Lecturer in Neurology. 164 Crescent St.

H. M. MACKAY, B.A., B.A.Sc., M.Am. Soc. C.E.
William Scott Professor of Civil Engineering. 4375 Montrose Ave., Westmount.

IRA ALLAN MACKAY, M.A. (Dal.), LL.B. (Dal.), Ph.D. (Cornell).
Professor of Constitutional Law. 737 Shuter St.

D. W. McKechnie, D.S.O., M.D.
Demonstrator in Medicine and Clinical Medicine. 210 Milton St.

S. Hanford McKee, C.M.G., B.A., M.D.
Lecturer in Bacteriology and Ophthalmology. 158 Crescent St.

Francis E. McKenty, M.D., F.A.C.S., F.R.C.S. (Lond.).
Demonstrator in Clinical Surgery and Operative Surgery. 648 Union Ave.

D. W. MacKenzie, B.A., M.D.
Clinical Professor of Genito-Urinary Surgery. 624 Sherbrooke St. West.

Charles Millar McKergow, M.Sc.
Professor of Mechanical Engineering.
343 Kensington Ave., Westmount.

L. H. McKim, M.D.
Assistant Demonstrator in Surgery. Medical Arts Building, corner Guy and Sherbrooke Sts. W.

J. W. McKinney, B.Sc.
Demonstrator in Chemistry. Chemistry Building.

A. R. M. MacLean, M.Sc., Ph.D.
Assistant Professor of Chemistry. 24 Chomedy St.

Cyrus Macmillan, M.A., Ph.D. (Harvard).
D. J. Greenshields Associate Professor of English. 836 Oxenden Ave.

J. A. MacMillan, M.D.
Demonstrator in Ophthalmology. 129 Stanley St.

S. D. MacNab.
Assistant in charge of Testing Laboratory. 758 Sherbrooke St. W.

M. D. MacOdrum, B.A. (Dal.).
Assistant in English. Arts Building.

J. Egbert McOuat, B.S.A.
Lecturer in Nature Study and Elementary Agriculture.
Macdonald College.

Sir Andrew Macphail, Kt., B.A., M.D., LL.D., M.R.C.S.
Professor of the History of Medicine. 216 Peel St.

S. A. MacSween, D.D.S.
Clinical Demonstrator in Dentistry. 444 Guy St.

Alex. McTaggart, Ph.D.
Assistant Professor of Agronomy. Macdonald College.

D. D. MacTaggart, B.A.Sc., M.D.
Professor of Medical Jurisprudence. 1075 Mount Royal Ave. West.

R. B. Malcolm, M.D.
Demonstrator in Anatomy and in Physiology. 295 Querbes Ave., Outremont.

T. A. Malloch, B.A., M.D.
Demonstrator in Medicine and Clinical Medicine. 232 Bishop St.

A. J. Martin, B.A., M.D.
Demonstrator in Anatomy. 300 Oxford Ave.

C. F. Martin, B.A., M.D.
Dean of the Faculty of Medicine and Professor of Medicine and Clinical Medicine. "The Sherbrooke," Sherbrooke St.

Hon. Acting Chief Justice J. E. Martin, B.C.L.
Professor of Commercial Law. 374 Wood Ave., Westmount.

O. Martin, L.D.S., D.D.S.
Lecturer in Cleft Palate Restorations. Ottawa, Ont.

E. H. Mason, Ph.B., M.D.
Lecturer in Medicine and Clinical Medicine and in Biological Chemistry. 214 Bishop St.

J. L. D. Mason, B.A., M.D.
Demonstrator in Medicine and Clinical Medicine. 24 Park Ave.

George Herbert Mathewson, B.A., M.D.
Clinical Professor of Ophthalmology.
202 New Birks Building, Phillips Sq.

T. H. Matthews, M.A. (Oxon.).
Assistant Professor of Mathematics. Arts Building.

W. A. Maw, B.S.A.
Lecturer in Poultry Husbandry. Macdonald College.

T. Vander Meerschen.
Instructor in Brass Wind Instruments. 472a Dorchester St.

D. Mendel, M.D.
Assistant Demonstrator in Medicine and Clinical Medicine.
1729 Park Ave.

Bertha Meyer, M.A.
Lecturer in German. 6 Hudson Ave., Westmount.

L. Michiels.
Instructor in French Horn. 28a Bishop St.

Hon. Mr. Justice P. B. Mignault, LL.D. (Laval and McGill).
Professor of Legal Ethics. Judges' Chambers, Supreme Court, Ottawa.

A. Mignolet.
Instructor in Flute. 22 Bishop St.

C. F. Moffat, B.A., M.D.
Lecturer in Medicine and Clinical Medicine. 97 Crescent St.

Alexander B. J. Moore, Ph.G.
Head of the Department of Pharmacy and Professor of Materia Medica and Pharmacy. 12 Winchester Ave., Westmount.

James B. Morison, D.D.S., L.D.S.
Professor of Orthodontia. Birks Building, Phillips Square.

A. G. Morphy, M.D.
Demonstrator in Psychiatry. 770 Sherbrooke St. West.

CHARLES E. MOYSE, B.A., LL.D.
Emeritus Vice-Principal, Dean of the Faculty of Arts and Molson Professor of the English Language and Literature.
324 Sherbrooke St. West.

W. J. MUIR, B.Sc.
Demonstrator in Mechanical Engineering. Engineering Building.

G. S. MUNDIE, B.A., M.D.
Lecturer in Psychiatry. 660 Sherbrooke St. West.

E. V. MURPHY, B.A., M.D.
Demonstrator in Medicine and Clinical Medicine.
Alexandra Hospital.

D. A. MURRAY, Ph.D. (Johns Hopkins).
Professor of Applied Mathematics. 857 University St.

R. BIRKETT MUSGROVE, F.R.C.O.
Lecturer in Music. Macdonald College.

A. R. NESS, B.S.A.
Lecturer in Animal Husbandry. Macdonald College.

A. S. NOAD, M.A.
Lecturer in English. Arts Building.

PERCY E. NOBBS, M.A. (Edin.), F.R.I.B.A., R.C.A.
Professor of Design. 38 Belvedere Road, Westmount.

MYERS NOTKIN, M.D.
Lecturer in Zoology. 145 Cherrier St.

J. APPLETON NUTTER, B.A., M.D., F.A.C.S.
Demonstrator in Orthopædic Surgery. 609 Drummond Building.

HORST OERTEL, M.D.
Strathcona Professor of Pathology and Director of Pathological Museum and Laboratories. Royal Victoria Hospital.

JOHN J. O'NEILL, M.Sc., Ph.D.
Assistant Professor of Geology. Chemistry Building.

CHARLES F. PASCOE, F.C.I.C.
Special Lecturer in Metallurgy. 682 Sherbrooke St. West.

FRANK STEWART PATCH, B.A., M.D.
Clinical Professor of Urology. 33 Bishop St.

DAVID PATRICK, M.D.
Lecturer in Gynæcology. 4464 Sherbrooke St., Westmount.

IVAN PATRICK, B.A., M.D.
Demonstrator in Histology and Embryology and in Gynæcology. 5021 Sherbrooke St. W.

W. J. PATTERSON, B.A., M.D., F.A.C.S.
Demonstrator in Clinical Surgery and Orthopædics.
Medical Arts Building, corner Guy and Sherbrooke Sts.

R. H. PATTON, B.Sc.
Lecturer in Mechanical Engineering. Engineering Bldg.

A. R. PENNOYER, M.D.
Lecturer in Oral Surgery. 418 Mackay St.

W. P. PERCIVAL, B.A.
Lecturer in Mathematics. Macdonald College.

ROGER PERDRIAT, Agrégé ès lettres de l'Université de France.
Assistant Professor of French Arts Building.

H. C. PERRIN, Mus. Doc. (Trinity Coll., Dublin Univ.).
Dean of the Faculty of Music and Professor of Music.
4319 Montrose Ave., Westmount.

MARGARET PERRY, B.Sc.
Assistant in Bacteriology. Macdonald College.

C. A. PETERS, D.S.O., M.D., M.R.C.S., L.R.C.P.
Lecturer in Medicine and Clinical Medicine. 216 Bishop St.

MISS BESSIE M. PHILP.
Head of the School of Household Science. Macdonald College.

A. H. PIRIE, B.Sc., M.D.
Lecturer in Roentgenology. Royal Victoria Hospital.

ETHEL POOLE.
Demonstrator to Quebec Women's Institutes. Macdonald College.

C. A. PORTEOUS, M.D.
Lecturer in Mental Diseases.
Protestant Hospital for the Insane, Verdun, Que.

J. BONSALL PORTER, E.M., Ph.D. (Columbia), D.Sc., Hon. (Univ. Cape of Good Hope), M.Inst. C.E.
Macdonald Professor of Mining Engineering and Director of the Mining Building. 130 McTavish St.

RALPH E. POWELL, B.A., M.D., F.R.C.S. (Edin.), F.A.C.S.
Demonstrator in Genito-Urinary Surgery. 132 Crescent St.

C. B. POWTER. School of Physical Education.

WILLIAM CONWAY QUAYLE, M.A., B.Sc.
Demonstrator in Physics. Physics Building.

I. M. RABINOVITCH, M.D.
Lecturer in Biological Chemistry. Montreal General Hospital.

L. C. RAYMOND, B.S.A.
Lecturer in Agronomy. Macdonald College.

L. C. READ, M.D.
Demonstrator in Pathology. Medical Building.

R. S. READ, B.A.
Assistant in English. Arts Building.

L. L. Reford, M.D.
Demonstrator in Anatomy. 307 Pine Ave. West.

Herschell E. Reilley, M.Sc.
Assistant Professor of Physics. 29 Ballantyne Ave. S., Montreal West.

Lawrence J. Rhea, B.Sc., M.D.
Associate Professor of Pathology. Montreal General Hospital.

Hon. Mr. Justice Thibaudeau Rinfret, B.A., B.C.L.
Lecturer in Municipal Law. 515 Roslyn Ave., Westmount.

Miss Eleanor M. Roach.
Superintendent Quebec Women's Institutes. Macdonald College.

Harold J. Roast, F.C.S., F.C.I.C.
Sessional Lecturer in Metallurgy. 393 Guy St.

E. E. Robbins, M.D.
Demonstrator in Medicine and Clinical Medicine. 1963 Park Ave.

A. R. Roberts, M.Sc.
Associate Professor of Mechanical Engineering. Engineering Building.

A. A. Robertson, B.A., M.D.
Lecturer in Clinical Medicine. 136 Mansfield St.

Hon. Mr. Justice J. Emery Robidoux, D.C.L., Officier de l'Instruction Publique, Chevalier de la Légion d'Honneur.
Emeritus Professor in the Faculty of Law. 679 University St.

A. J. Roche, Licencié ès lettres de l'Université de France.
Lecturer in Romance Languages. Arts Building.

J. T. Rogers, B.A., M.D.
Demonstrator in Oto-Laryngology. 758 Sherbrooke St. W.

G. Romano.
Instructor in Clarionet. 755 Mt. Royal Ave. East.

Harold E. A. Rose, B.A., B.C.L., LL.M.
Lecturer in Roman and Civil Law.
Apt. 17, 384 Claremont Ave., Westmount.

J. Rosenbaum, M.D.
Assistant Demonstrator in Ophthalmology. 36 Sherbrooke St. W.

A. Ross, M.C., B.A., M.D.
Demonstrator in Anatomy. 5027 Sherbrooke St. W.

Mrs. R. Ross, L.Mus.
Instructor in Pianoforte. 4628 St. Catherine St. W.

S. Graham Ross, M.D.
Demonstrator in Pediatrics. 262 Bishop St.

Colin K. Russel, B.A., M.D.
Clinical Professor of Neurology. 641 Argyle Ave., Westmount.

R. F. RUTTAN, B.A. (Toronto), M.D., D.Sc. (Toronto), F.R.S.C.
Macdonald Professor of Chemistry and Director of the Department of Chemistry. 660 Sherbrooke St. West.

MARY SAMUEL, R.N. (Late Supt. Training School, Roosevelt Hospital, N.Y., and Lakeside Hospital, Cleveland).
Instructor in Training School Supervision and Administration. School for Graduate Nurses.

GEORGE W. SCARTH, M.A.
Assistant Professor of General Physiology. Biological Building.

W. SCHIPPEL, B.Sc.
Demonstrator in Electrical Engineering. Engineering Building.

W. J. SCOTT, M.D.
Lecturer in Pathology. Montreal General Hospital.

F. A. C. SCRIMGER, V.C., B.A., M.D.
Lecturer in Surgery and Clinical Surgery and Director of Experimental Medicine. Medical Arts Building, corner Guy and Sherbrooke Sts.

W. DE M. SCRIVER, B.A., M.D.
Assistant Demonstrator in Medicine and Clinical Medicine. 4425 St. Catherine St. West.

M. T. SENG, M.D.
Demonstrator in Urology. 760 Sherbrooke St. West.

FRANK J. SHAUGHNESSY, LL.B., P.H.G.
Football and Hockey Coach. 131 Brock Ave. S., Montreal West.

MISS FLORA MADELINE SHAW, R.N., Diploma Teachers' College, Columbia University.
Directress School for Graduate Nurses. McGill University.

A. NORMAN SHAW, B.A. (Cantab.), D.Sc.
Associate Professor of Physics. 65 Somerville Ave., Westmount.

FRANCIS J. SHEPHERD, M.D., LL.D. (Edin. and Harvard), F.R.C.S., Hon. (Edin. and Eng.).
Emeritus Dean and Professor of Anatomy. 152 Mansfield St.

GEORGE ERIC SIMPSON, M.A., Ph.D.
Assistant Professor of Biochemistry. Biological Building.

J. SIMPSON.
Instructor in Household Science. Macdonald College.

J. C. SIMPSON, B.Sc.
Associate Professor of Histology and Embryology. 313 Hampton Ave.

H. A. SIMS, M.D.
Demonstrator in Psychiatry. Medical Arts Building, corner Guy and Sherbrooke Sts. W.

G. F. SKINNER, M.D.
Assistant Demonstrator in Pathology. Royal Victoria Hospital.

S. B. Slack, M.A. (Oxon.).
Professor of Greek. Arts Building.

Elizabeth Smellie, R.N., Diploma Simmons College.
Instructor in Public Health Nursing. School for Graduate Nurses.

Herbert Arthur Smith, M.A. (Oxon.).
Vice-Dean of the Faculty of Law, Professor of Jurisprudence and Common Law. 427 Elm Ave., Westmount.

L. A. Smith, M.Sc.
Demonstrator in Physics. Physics Building.

John Ferguson Snell, B.A., Ph.D. (Cornell), F.C.I.C., F.A.A.A.S.
Professor of Chemistry. Macdonald College.

Gordon St. George Sproule, M.Sc.
Lecturer in Metallurgy. 54 Victoria Ave., St. Lambert, Que.

Mrs. B. Stackhouse.
Instructor in Violin. 22 Webster Ave., St. Lambert.

J. Stafford, B.A. (Toronto), M.A., Ph.D. (Leipzig).
Assistant Professor of Zoology. 10 Mercille Ave., St. Lambert, Que.

Alfred Stansfield, D.Sc. (London), A.R.S.M., F.R.S.C.
Birks Professor of Metallurgy. 82 Westmount Blvd.

T. A. Starkey, M.B. (Lond.), D.P.H. (Lond.), M.D.C.M. (ad eun., McGill), M.R.C.S. (Eng), L.R.C.P. (Lond.), Fellow Royal San. Inst.
Strathcona Professor of Hygiene. 126 Durocher St.

R. L. Stehle, M.A., Ph.D.
Associate Professor of Pharmacology. Biological Building.

F. A. Stevenson, D.D.S., L.D.S., D.M.D. (Harvard).
Lecturer in Dental History, Ethics and Economics. 154 Metcalfe St.

A. Stewart, M.D.
Assistant Demonstrator in Surgery and Clinical Surgery. Medical Building.

C. C. Stewart, M.D.
Demonstrator in Pharmacology. 60 Sherbrooke St. W.

J. W. Stirling, M.B. (Edin.), M.D.
Emeritus Professor of Ophthalmology. 388 Sherbrooke St. W.

R. R. Struthers, B.A., M.D.
Assistant Demonstrator in Pediatrics. 670 Sherbrooke St. W.

R. M. Sugars, M.A., A.I.A.
Director-Secretary of the School of Commerce and Associate Professor of Spanish. Arts Building.

C. T. Sullivan, B.A., Ph.D. (Chicago), D.Sc., F.R.S.C.
Associate Professor of Mathematics. Engineering Building.

Robert Summerby, M.S.A.
Professor of Agronomy. Macdonald College.

HON. MR. JUSTICE E. FABRE SURVEYER, B.A. (Laval), B.C.L.
Professor of Civil Procedure. 128 Maplewood Ave., Outremont.

JENNIE LAURA SYMONS, M.Sc.
Demonstrator in Botany. Biological Building.

JOHN TAIT, M.D., D.Sc., F.R.S.E.
Joseph Morley Drake Professor of Physiology. Biological Building.

WILLIAM D. TAIT, B.A. (Dal.), M.A. and Ph.D. (Harvard).
Associate Professor of Psychology and Director of the Psychological Laboratory. 264 Regent Ave., Montreal.

HERBERT TATE, B.A. (Trinity College, Dublin), M.A., F.S.S.
Assistant Professor of Mathematics. Arts Building.

W. J. TAWSE, B.S.A.
Lecturer in Horticulture. Macdonald College.

F. J. TEES, M.C., B.A., M.D.
Lecturer in Surgery and Clinical Surgery and Demonstrator in Anatomy. 105 Crescent St.

ALEXANDER M. THOMPSON, Ph.D. (Harvard).
Assistant Professor of Classics. Arts Building.

I. MACLAREN THOMPSON, B.Sc., M.B., Ch.B. (Edin.).
Lecturer in Anatomy. Medical Building.

JOHN GRANT THOMPSON, M.A.
Lecturer in History and Geography. Macdonald College.

ROBERT R. THOMPSON, M.C., A.M.C.A. (England and Wales).
Assistant Professor of Accountancy, Industrial Organization and Business Organization. 627 Old Orchard Ave., N.D.G.

T. C. THOMPSON, B.Sc.
Demonstrator in Physics. Physics Building.

G. THOMSON, B.Sc.
Demonstrator in Descriptive Geometry and Mechanical Engineering. Engineering Building.

LESLIE R. THOMSON, B.A.Sc., M.E.I.C., M.Am.Soc. C.E.
Special Lecturer in Structural Engineering. Engineering Building.

W. W THOMSON, M.Sc.
Demonstrator in Chemistry. Chemistry Building.

A. W. THORNTON, D.D.S., L.D.S., D.D.Sc., F.A.C.D.
Dean of the Faculty of Dentistry and Professor of Clinical Dentistry. 147 Grey Ave.

L. H. THORNTON, D.D.S., L.D.S.
Clinical Demonstrator in Dentistry. 394 Victoria Ave., Westmount.

JOHN L. TODD, B.A., M.D., M.R.Sc. (Eng.), D.Sc. (Hon., Liverpool).
Associate Professor of Parasitology. Medical Building.

R. TOMLINSON.
Instructor in Double Bass. 1623 Jeanne Mance St.

F. T. Tooke, B.A., M.D.
Lecturer in Ophthalmology. 368 Mountain St.

Mlle Lucie Touren, Licenciée ès Lettres de l'Université de France.
Assistant Professor of French and Resident Tutor, Royal Victoria College. Royal Victoria College.

Ramsay Traquair, F.R.I.B.A., M.A. (Hon.).
Macdonald Professor of Architecture. Engineering Building.

Bryceson Treharne.
Instructor in Pianoforte.

R. de H. Tupper.
Instructor of Music. Conservatorium of Music.

Philip J. Turner, F.R.I.B.A.
Special Lecturer in Building Construction, Specifications, and Professional Practice. 274 Beaver Hall Hill.

William George Turner, M.C., B.A., M.D., M.R.C.S. (Eng.).
Clinical Professor of Orthopædics. Medical Arts Building, corner Guy and Sherbrooke Sts. W.

O. S. Tyndale, M.A., B.C.L.
Assistant Professor of Commercial Law. 51 Chesterfield Ave., Westmount.

T. C. Vanterpool, B.S.A.
Assistant in Botany and Instructor in Home Dairying. Macdonald College.

F. M. Van Wagner, B.P.E.
Track Coach, Assistant Physical Director. Department of Physical Education.

C. U. Vessot, B.Sc.
Lecturer in Mechanical Engineering. Engineering Building.

Paul Villard, M.A., D.D., M.D., Officier de l'Instruction Publique.
Assistant Professor of French. 17 Vendome Ave., Montreal.

Norman Viner, B.A., M.D.
Demonstrator in Neurology. Medical Building.

Miss Ethel Wain.
Assistant Physical Director for Women. 109 St. James St., St. Lambert.

Arnold Wainwright, B.A., B.C.L., K.C.
Professor of the Law of Evidence. 4 Seaforth Ave.

L. J. Waldbauer, B.Chem. (Cornell), M.Sc.
Demonstrator in Chemistry. Chemistry Building.

A. H. Walker.
Instructor in Floriculture. Macdonald College.

J. J. Walker, B.A., M.D.
Assistant Demonstrator in Medicine and Clinical Medicine. Medical Arts Building, corner Guy and Sherbrooke Sts.

G. A. WALLACE, M.Sc.
Assistant Professor of Electrical Engineering. Engineering Building.

HERMANN WALTER, M.A. (Edin.), Ph.D. (Munich).
Professor of German. 635 University St.

THEO. R. WAUGH, B.A., M.D.
Dr. James Douglas Fellow and Lecturer in Pathology. Medical Building.

W. T. WAUGH, B.D., M.A.
Associate Professor of History. Arts Building.

JAMES WEIR, B.Sc.
Assistant Professor of Geodesy. Engineering Building.

JOSEPH W. WELDON, K.C.
Lecturer in Engineering Law. 355 Olivier Ave., Westmount.

G. S. WHITBY, M.Sc., Ph.D., A.R.C.Sc.
Associate Professor of Chemistry. Chemistry Building.

E. HAMILTON WHITE, B.A., M.D.
Demonstrator in Oto-Laryngology. 756 Sherbrooke St. W.

ALFRED E. WHITEHEAD, Mus. Doc., A.R.C.O.
Instructor in Organ and Lecturer in theoretical subjects. 210 Addington Ave.

H. T. C. WHITLEY, M.D.
Assistant Demonstrator in Pathology. Medical Building.

S. ERNEST WHITNALL, M.A., M.D., B.Ch. (Oxon.), M.R.C.S. (Eng.), L.R.C.P. (Lond.).
Robert Reford Professor of Anatomy. Medical Building.

J. C. WICKHAM, B.A., M.D.
Assistant Demonstrator in Medicine and Clinical Medicine. 4484 Sherbrooke St. W., Westmount, Que.

A. L. WILKIE, M.D.
Assistant Demonstrator in Pathology. Royal Victoria Hospital.

W. A. WILKINS, M.D.
Demonstrator in Roentgenology and Dental Radiography. 289 Peel St.

ARTHUR WILLEY, M.A., D.Sc., F.R.S.
Strathcona Professor of Zoology. 58 Metcalfe St.

BASIL WILLIAMS, M.A.
Kingsford Professor of History. 95 Arlington Ave., Westmount.

J. R. WINDSOR, B.Sc.
Demonstrator in Descriptive Geometry. Engineering Building.

W. D. WOODHEAD, B.A. (Oxon.), M.A. (Alta.), Ph.D. (Chicago).
Professor of Classics and Chairman of the Department. Arts Building.

C. R. WITTEMORE, B.Sc.
Research Fellow in Metallurgy. Chemistry Building.

H. P. WRIGHT, B.A., M.D.
Demonstrator in Pediatrics. Medical Arts Building, corner Guy and Sherbrooke Sts.

R. P. WRIGHT, D.S.O., C.M.G., M.D.
Assistant Demonstrator in Oto-Laryngology. 673 Union Ave.

MRS. W. J. WRIGHT, R.N.
Instructor in Home Nursing. Macdonald College.

C. F. WYLDE, C.B., M.D.
Lecturer in Clinical Medicine and Demonstrator in Pediatrics. 101 Crescent St.

H. M. YOUNG, M.D.
Demonstrator in Anatomy.
386 Sherbrooke St. West.

CALENDAR.

SESSION 1923-24.

1923.

Wednesday,	Sept.	5	School for Teachers opens.
Monday,	"	10	Register opens for students in Law.
Thursday,	"	13	School of Household Science opens.
Friday,	"	14	Last day for Registration in Law.
Monday,	"	17	Matriculation Examination begins. Exhibition, Scholarship and Supplemental Examinations in Arts. Conservatorium of Music opens. Lectures begin in Law. Register opens for students in Medicine and Dentistry.
Tuesday,	"	18	Lectures commence in the Faculty of Agriculture.
Wednesday,	"	19	School of Physical Education opens.
Thursday,	"	20	Register opens in the School for Graduate Nurses.
Monday,	"	24	Lectures commence in Medicine and Dentistry. Register opens for students in Applied Science who have no conditions.
Wednesday,	"	26	Meeting of Student Advisers in Arts.
Thursday, and Friday,	"	27, 28	Registration days for students in Arts and Applied Science.
Saturday,	"	29	No registrations accepted.
Monday,	Oct.	1	Lectures begin in Arts and Applied Science and the Schools for Social Workers and Graduate Nurses. Meeting of Faculty of Applied Science.
Thursday,	"	4	Physics Building Committee.
Friday,	"	5	General Convocation for conferring degrees in the Royal Victoria College at 4 p.m.
Saturday,	"	6	Founder's Day.
Monday,	"	8	Library Committee. Museum Committee.
Wednesday,	"	10	Summer Essays in Applied Science to be sent in. Regular Meeting of Corporation.
Thursday,	"	11	Meeting of Faculty of Medicine.
Friday,	"	12	Meeting of Faculty of Arts.
Monday,	"	15	Engineering Building Committee. Chemistry and Mining Building Committee.
Friday,	"	19	Sports Day. No lectures.
Saturday,	"	20	Meeting of Medical Faculty Council.
Friday,	Nov.	2	Meeting of Faculty of Arts.
Monday,	"	5	Meeting of Faculty of Applied Science.
Monday,	"	12	Thanksgiving Day. No lectures.

Monday,	Nov.	19	Engineering Building Committee. Chemistry and Mining Building Committee.
Friday,	"	30	Meeting of Faculty of Arts.
Monday,	Dec.	3	Meeting of Faculty of Applied Science.
Thursday,	"	6	Physics Building Committee. Orchestral Concert, Faculty of Music.
Monday,	"	10	Library Committee. Museum Committee.
Wednesday,	"	12	Regular Meeting of Corporation.
Monday,	"	17	Engineering Building Committee. Chemistry and Mining Building Committee.
Friday,	"	21	Meeting of Faculty of Arts.
Saturday,	"	22	Last day of lectures before Christmas.

1924.

Monday,	Jan.	7	Lectures resumed in all Faculties. Meeting of Faculty of Applied Science.
Thursday,	"	10	Meeting of Faculty of Medicine.
Friday,	"	11	Meeting of Faculty of Arts.
Saturday,	"	12	First Term lectures end in all Faculties.
Tuesday,	"	15	First Term Examinations begin.
Wednesday,	"	16	First Term Examinations in Applied Science begin.
Saturday,	"	19	Meeting of Medical Faculty Council.
Monday,	"	21	Engineering Building Committee. Chemistry and Mining Building Committee. Second Term opens. Meeting of Student Advisers in Arts.
Friday,	Feb.	1	Meeting of Faculty of Arts.
Monday,	"	4	Meeting of Faculty of Applied Science. Museum Committee. Library Committee.
Thursday,	"	7	Physics Building Committee.
Wednesday,	"	13	Regular Meeting of Corporation.
Monday,	"	18	Engineering Building Committee. Chemistry and Mining Building Committee.
Thursday,	"	28	Orchestral Concert, Faculty of Music.
Friday,	"	29	Meeting of Faculty of Arts.
Monday,	Mar.	3	Meeting of Faculty of Applied Science.
Wednesday,	"	5	Ash Wednesday. No lectures
Friday,	"	7	Meeting of Faculty of Arts.
Monday,	"	17	Engineering Building Committee. Chemistry and Mining Building Committee.
Thursday,	April	3	Physics Building Committee.
Friday,	"	4	Meeting of Faculty of Arts.
Saturday,	"	5	Meeting of Medical Faculty Council.
Monday,	"	7	Meeting of Faculty of Applied Science. Library Committee. Museum Committee.

Wednesday,	April	9	Regular Meeting of Corporation.
Saturday,	"	12	Second Term lectures end for the first three years in Applied Science.
Tuesday,	"	15	Sessional Examinations in Applied Science begin, for the first three years.
Friday,	"	18	Good Friday. No lectures.
Saturday,	"	19	No lectures.
Monday,	"	21	Engineering Building Committee. Chemistry and Mining Building Committee.
Thursday,	"	24	Meeting of Faculty of Medicine. Orchestral Concert, Faculty of Music.
Monday,	"	28	Summer School in Applied Science opens.
Wednesday,	"	30	Lectures end in all Faculties. Meeting of Student Advisers in Arts.
Friday,	May	2	Meeting of Faculty of Arts.
Saturday,	"	3	Meeting of Medical Faculty Council.
Monday,	"	5	Meeting of Faculty of Applied Science. Sessional Examinations begin in all Faculties.
Monday,	"	19	Engineering Building Committee. Chemistry and Mining Building Committee.
Saturday,	"	24	Victoria Day. Summer School in Applied Science ends.
Friday,	"	30	Convocation for conferring Degrees in all Faculties.
Tuesday,	June	3	King's Birthday.
Thursday,	"	5	Physics Building Committee.
Monday,	"	9	Library Committee. Museum Committee.
Wednesday,	"	11	Regular Meeting of Corporation.
Monday,	"	16	Engineering Building Committee. Chemistry and Mining Building Committee.
Tuesday,	July	1	Dominion Day.

McGill University.

HISTORY AND CONSTITUTION.

FOUNDATION AND EARLY HISTORY.

McGill University owes its origin to a private endowment. It was founded by the Hon. James McGill, a leading merchant and public-spirited citizen of Montreal, who died in 1813. By his will, dated January 8th, 1811, he bequeathed his property of Burnside (consisting of 46 acres of land with the dwelling-house and other buildings thereon) and a sum of £10,000 in money to found a college in a provincial university, the erection of which had already been provided for by the British Government. The four trustees appointed under his will were directed to convey the property of the bequest to the Royal Institution for the Advancement of Learning, a body which, in 1802, had been incorporated by the Legislature "for the establishment of free schools and the advancement of learning" in the Province of Quebec. The conditions upon which the property was to be transferred to the Royal Institution for the Advancement of Learning were, mainly, that that Institution should, within ten years after the testator's decease, erect and establish on his Burnside estate "a University or College, for the purposes of education and the advancement of learning in this Province," and that the college, or one of the colleges in the University, if established, should "be named and perpetually be known and distinguished by the appellation of McGill College." Owing to persistent opposition by the leaders of one section of the people to any system of governmental education and to the refusal by the Legislature to make the grants of land and money which had been promised, the proposed establishment of the provincial university by the British Government was abandoned.

In so far as the McGill College was concerned, however, the Royal Institution at once took action by applying for a Royal Charter. Such a charter was granted in 1821, and the Royal Institution prepared to take possession of the estate, but, owing to protracted litigation, this was not surrendered to them till 1829, when the work of teaching was begun in two faculties, Arts and Medicine. The record of the first thirty years of the University's existence is an unbroken tale of financial embarrassment and administrative difficulties. The charter was cumbrous and unwieldy, and unsuited to a small college in the circumstances of this country, and the University, with the exception of its medical faculty, became almost extinct. But after thirty years the citizens of Montreal awoke to the value of the institution which was struggling in their midst. Several gentlemen undertook the responsibility of its reorganization, and, in 1852, an amended charter was secured. The Governor-General of Canada for the time being, Sir Edmund Head, became interested in its fortunes, and in 1855, with the advent of a new Principal, an era of progress and prosperity began.

HISTORICAL CALENDAR.

October	6, 1744.	James McGill born.
January	8, 1811.	Date of Will of Hon. James McGill, bequeathing to certain persons, for transfer to the Royal Institution for the Advancement of Learning, his Burnside property of 46 acres and £10,000 in money, for the founding of McGill College.
December	19, 1813.	James McGill died.
March	31, 1821.	Royal Charter granted to the Royal Institution for the Advancement of Learning for the foundation of McGill College.
May	1, 1822.	Montreal General Hospital opened for patients.
January	29, 1823.	Charter granted to the Montreal General Hospital.
October	28, 1824.	Lectures began in the Montreal Medical Institution.
January	29, 1829.	Venerable Archdeacon Mountain appointed Principal. Teaching begun in two Faculties, Arts and Medicine.
June	28, 1829.	The Montreal Medical Institution became the Medical Faculty of McGill University.
April	1834.	Principal Mountain resigned.
April	22, 1834.	Rev. T. T. Uxford appointed Principal.
July	13, 1835.	Principal Uxford resigned.
November	18, 1835.	Rev. John Bethune appointed Principal, pro tem.
July	12, 1843.	Rev. John Bethune appointed Principal.
July	7, 1846.	Principal Bethune resigned.
July	7, 1846.	Mr. Edward Allen Meredith appointed Principal.
	1848.	Course in Law begun in the Faculty of Arts.
	1852.	Amended Charter obtained.
February	1, 1853.	Principal Meredith resigned.
February	1, 1853.	Hon. Mr. Justice C. D. Day appointed Principal, pro tem.
	1853.	Faculty of Law established.
September	8, 1855.	Principal Day resigned.
September	8, 1855.	Sir William Dawson appointed Principal.
	1856.	Course in Engineering begun in the Faculty of Arts.
October	10, 1862.	William Molson Hall opened.
	1863.	Observatory opened.
	1864.	Congregational College of Canada opened in Montreal and affiliated to McGill University. (This College had been founded in Dundas, Ontario, in 1839.)
	1865.	Montreal Presbyterian College founded. (Work begun in the Lecture Hall of Erskine Church, corner of St. Catherine and Windsor Streets.)

1871.	Engineering Course amplified into the Department of Practical Science in the Faculty of Arts.
1872.	Work of the Faculty of Medicine transferred from their downtown quarters to the McGill Campus.
1873.	Diocesan College founded.
1873.	First Montreal Presbyterian College Building erected.
1875.	Wesleyan Theological College opened.
1878.	Faculty of Applied Science organized.
1879.	Wesleyan Theological College affiliated to McGill University.
1880.	Diocesan College affiliated to McGill University.
August 16, 1882.	Peter Redpath Museum opened.
1882.	Presbyterian College enlarged by the erection of the David Morrice Hall.
1883.	Old Wesleyan Theological College erected.
1884.	Present Congregational College Buildings opened. (From 1864 to 1884 the work of the College had been carried on first in Zion Church and afterwards in Emmanuel Church.)
February 24, 1893.	Macdonald Physics and Engineering Buildings opened.
July 31, 1893.	Sir William Dawson resigned the Principalship.
October 31, 1893.	Redpath Library opened.
1894.	Observatory enlarged.
1894.	Royal Victoria Hospital opened.
August 7, 1895.	Sir William Peterson appointed Principal.
1895.	A tract of about 35 acres, comprising the top of Westmount Mountain, purchased and donated to the University by Sir William Macdonald.
1896.	Present Montreal Diocesan College Buildings opened.
1896.	Department of Architecture established.
December 20, 1898.	Macdonald Chemistry and Mining Buildings opened.
September 4, 1899.	Royal Victoria College for women opened.
November 18, 1899	Sir William Dawson died.
September 18, 1901.	Strathcona Medical Buildings opened.
1903.	Dental Department opened in connection with the Faculty of Medicine.
October 14, 1904.	Conservatorium of Music opened.
1905.	Strathcona Hall opened. (This is the home of the Students' Christian Association of McGill University.)
1905.	The Medical Faculty of Bishop's College amalgamated with McGill.

1906. McGill Union (the students' social centre) opened.
1906. Department of Commerce established under the Faculty of Arts.
April 5, 1907. Macdonald Engineering Building burned.
" 16, 1907. Medical Building burned.
" 24, 1907. Faculty of Agriculture established.
November 5, 1907. Macdonald College opened.
April 27, 1909. New Engineering Building opened.
1909. Power Plant erected.
1909. Joseph property, at the south-west corner of the McGill Campus, purchased and donated to the University by Sir William Macdonald.
June 5, 1911. New Medical Building opened.
July 4, 1911. Gift of Frothingham, Molson and Law properties (25 acres) from Sir William Macdonald.
November 20–24, 1911. $1,500,000.00 raised chiefly from the citizens of Montreal as a general endowment for the University.
1912. Montreal Co-operating Theological Colleges established. (This is a union of the Congregational, Diocesan, Presbyterian and Wesleyan Colleges for a certain number of lecture courses.)
1912. McGill School of Physical Education established.
1913. New Wesleyan Theological College opened.
1915. McGill Stadium completed. (This was erected on Macdonald Park, which was donated to the University by Sir William Macdonald in 1911.)
1917. Montreal College of Pharmacy incorporated with McGill University as the Department of Pharmacy of the Faculty of Medicine.
February 25, 1918. Gift of $1,000,000 from the Carnegie Corporation of New York "in recognition of the noble and devoted service and sacrifice of McGill towards Canada's part in the Great War."
May 1, 1918. Sir William Peterson resigned the Principalship, on account of ill-health.
1918. Department of Social Science established.
October 25, 1919. Name of the McGill Stadium changed to "The Percival Molson Stadium" and formally dedicated to the memory of the late Percival Molson, who was killed in the Great War and who bequeathed $75,000 for its erection.
1919. Faculty of Dentistry established.
1920. Faculty of Music established.

1920.	School for Graduate Nurses established.
August 1, 1920.	Sir Arthur Currie appointed Principal.
January 4, 1921.	Sir William Peterson died.
November 15, 1921, to November 20, 1921.	Over $4,000,000 subscribed by citizens of Montreal and graduates for the funds of the University; also $1,000,000 granted for the same purpose by the Government of the Province of Quebec, and $1,000,000 by the Rockefeller Foundation of New York for medical education.

GOVERNMENT OF THE UNIVERSITY.

By the amended Charter "the Governors, Principal, and Fellows" of the University are constituted a body politic and corporate, with all the usual rights and privileges of corporate bodies. The supreme authority, however, is vested in the Crown, and is exercised by his Excellency the Governor-General of Canada, for the time being, as **Visitor.** This is a special and important feature of the constitution, for, while it gives the University an imperial character and removes it at once from any merely local or party influence, it secures the patronage of the head of the political system of the country.

The **Governors** of the University are the members of the Royal Institution for the Advancement of Learning, above mentioned, and in them are vested the management of finances, the passing of University statutes and ordinances, the appointment of professors, and other important duties. Their number is limited to twenty-five. Three of these are elected by the members of the Graduates' Society and other appointments are made by the nomination of the remaining members with the approval of the Visitor. The President of the Board of Governors is ex-officio Chancellor of the University.

The **Principal** is the academic head and chief administrative officer. He is appointed by the Board of Governors (of which body he is a member ex-officio). He also holds the office of Vice-Chancellor of the University.

The **Fellows** (42 in number) are selected with reference to the representation of all the faculties and departments of the University, and of the graduates, affiliated colleges, and other bodies.

The Governors, Principal and Fellows together constitute the **Corporation,** the highest academical body. Its powers are fixed by statute and include the framing of all regulations touching courses of study, matriculation, graduation, discipline and the granting of degrees.

The carrying out of the regulations of Corporation along with primary responsibility for the conduct of the educational work of the University is entrusted to the several **Faculties**—Arts, Medicine, Law, Applied Science, Agriculture, Dentistry and Music.

INCORPORATED AND AFFILIATED COLLEGES.

INCORPORATED COLLEGES.

Macdonald College is situated at Ste. Anne de Bellevue, about twenty miles from Montreal. It consists of three departments:—The School of Agriculture, the School of Household Science, and the School for Teachers. Courses leading to the Bachelor's and Master's degrees in Agriculture are under the control of the Corporation of McGill University; all the short term courses in agriculture, as well as the course in domestic science, are under the direction of the Executive Committee of Macdonald College, and those for diplomas to teach in the Province of Quebec are subject to the immediate supervision of the Teachers' Training Committee. Full information is given in the Macdonald College Announcement, which will be sent on application to the Principal, Macdonald College, Que.

The Royal Victoria College is the women's College of McGill University for courses in the Faculty of Arts. For further particulars, see pages 178-183.

AFFILIATED COLLEGES.

Acadia, Alberta and Mount Allison Universities and the University of St. Francis Xavier's College are affiliated to McGill University to the extent that students who have completed the two-year course in engineering given by these universities are admitted directly to the Third Year in any of the engineering courses in the Faculty of Applied Science.

Students from these universities entering the Third Year must take the summer school suitable to their course, in May, or the special school in September, which will open in 1923 on September 4th in Chemical, Mechanical and Metallurgical Engineering, and on September 17th in Civil and Mining Engineering.

Royal Military College.—Graduates of the Royal Military College of Kingston are admitted to the Third Year in the several engineering departments of the Faculty of Applied Science. They must in all cases take the respective summer schools pertaining to these several courses, which are held in September, as per the preceding paragraph.

Arrangements have also been made whereby graduates and students of the Mechanical Science course in the University of Cambridge will be admitted to advanced standing in the Faculty of Applied Science under definite regulations, particulars of which can be obtained from the Dean of the Faculty.

AFFILIATED THEOLOGICAL COLLEGES.

The Theological Colleges named below are affiliated to the University under the following arrangements:—Students in these institutions who are pursuing a double course in Arts and Theology (six years at least) will be exempted from a half course in Arts in each of the Third and Fourth Years or a whole course in either.

The Congregational College of Canada, Montreal.—Principal, Rev. D. L. Ritchie, B.A., D.D., 58 McTavish St.

The Diocesan College of Montreal.—Principal, Rev. E. I. Rexford, M.A., LL.D., 743 University St.

The Presbyterian College, Montreal, in connection with the Presbyterian Church in Canada.—Principal, Rev. D. J. Fraser, M.A., LL.D., D.D., 69 McTavish St.

The Wesleyan College of Montreal.—Principal, Rev. James Smyth, LL.D., 760 University St.

A movement was inaugurated in the session 1912-13 for a large measure of co-operation among the above Colleges, with the result that a considerable portion of the work which had hitherto been done separately is now taken in joint classes.

For Calendars and all necessary information, apply to the Principals of the several Colleges.

AFFILIATION TO OTHER UNIVERSITIES.

The University is affiliated to the universities of Oxford, Cambridge and Dublin, under conditions which allow an undergraduate who has taken two years' work, and has passed the Second Year sessional examination in Arts, to pursue his studies and take his degree at any of these universities on a reduced period of residence.

FACULTIES, COURSES AND DEGREES.

The educational work of the University is carried on in McGill College, the Royal Victoria College for Women, and other University buildings in Montreal; and also in Macdonald College at Ste. Anne de Bellevue.

COURSES FOR DEGREES AND DIPLOMAS.

The several courses offered by the University are as follows:—

In the Faculty of Arts.

For the degree of Bachelor of Arts (B.A.).
" " " " Bachelor of Science (B.Sc. in Arts).
" " " " Bachelor of Commerce (B.Com.).

The undergraduate courses of study which lead to the degree of B.A. or B.Sc. extend over four sessions of eight months each. In the Second, Third and Fourth years extensive options are provided, and certain exemptions are also allowed to professional students. See pages 124-139

The course for the degree of Bachelor of Commerce extends over three years. See page 187.

The following courses are also offered:—One leading to the degree of Bachelor of Science in Agriculture, with the privilege of qualifying for an Academy Diploma; and another to the degree of Bachelor of Household Science. The first two years are taken in the Faculty of Arts and the last two in the Faculty of Agriculture, or the School of Household Science, as the case may be. Details of these two courses will be found in the Macdonald College Announcement.

The undergraduate course in Arts can be taken along with the undergraduate course in Medicine, in eight years, or with that in Applied Science or Dentistry, in six years.

The courses in Arts are open to women (who are educated mainly in separate classes) on equal terms with men. Residential accommodation for women students is provided in the Royal Victoria College. Further particulars are given on pages 178-183.

Holders of the degree of B.A. from this University are admitted to the study of the learned professions, without preliminary examination, in the different provinces of Canada, and in Great Britain and Ireland, and elsewhere. They will also be granted Academy Diplomas to teach in the Province of Quebec, provided they have passed an examination in pedagogy and have taught, under supervision, for the time required by law.

In the Faculty of Applied Science.

For the degree of Bachelor of Architecture (B.Arch.).

For the degree of Bachelor of Science (B.Sc.), in the departments of Chemical Engineering, Civil Engineering, Electrical Engineering, Mechanical Engineering, Metallurgical Engineering, and Mining Engineering.

The undergraduate courses of study for the degree of B.Sc. extend over four sessions, averaging (with summer sessions) about eight months each, and provide a thorough professional training in the departments mentioned above. The course for the degree of B.Arch. extends over five years. Full particulars are given on pages 201-278.

The undergraduate course in Arts can be taken along with the undergraduate course in Applied Science in six years.

In the Faculty of Law.

For the degree of Bachelor of Civil Law (B.C.L.).
" " " " Bachelor of Laws (LL.B.).

The undergraduate course for each of these degrees extends over three sessions of eight and a half months each.

In the Faculty of Medicine.

For the degree of Doctor of Medicine and Master of Surgery (M.D., C.M.).

For the degree of B.Sc. in Medicine.

For the Diploma of Public Health.

For the Diploma of Pharmacy.

The undergraduate course of study leading to the degree of M.D., C.M., extends over six sessions of eight months each. For further information regarding the first three courses see pages 279-322; and for details of the course in Pharmacy see pages 323-330.

The undergraduate course in Arts can be taken along with the undergraduate course in Medicine in eight years.

In Macdonald College.

For the degree of Bachelor of Science in Agriculture (B.Sc. in Agriculture and B.S.A.).

Other courses in the School of Agriculture.

For the degree of Bachelor of Household Science (B.H.S.), two years in Arts, and two in the School of Household Science.

Other courses in the School of Household Science.

The several courses for teachers' diplomas.

The course of study for the degree of Bachelor of Science in Agriculture extends over four sessions of about eight months each. It aims to provide a thorough theoretical and practical training in the several branches of the science.

The Macdonald College Announcement, containing full details as to buildings, courses, terms of admission, fees, etc., can be obtained from the Principal, Macdonald College P.O., Que.

In the Faculty of Dentistry.

For the degree of Doctor of Dental Surgery (D.D.S.).

The undergraduate course of study leading to the degree of D.D.S. extends over four sessions of eight months each. (For further particulars, see pages 346-366.)

The undergraduate course in Arts can be taken along with the undergraduate course in Dentistry in six years.

In the Faculty of Music.

For the degree of Bachelor of Music (Mus. Bac.).

For the Diploma of Licentiate in Music, and the several Grade examination certificates.

Students are admitted as *Regular Students* taking an organized course leading to the diploma of Licentiate in Music or the degree of Bachelor of Music or as *Partial Students*, who, under certain conditions and after examination, can obtain certificates bearing the imprimatur of the University. Full details can be obtained on application to the Secretary of the McGill Conservatorium of Music, 323 Sherbrooke St. West, Montreal.

In the Faculty of Graduate Studies and Research.

For the degrees of Master of Arts (M.A.), Master of Science (M.Sc.), Master of Laws (LL.M.), Master of Science in Agriculture (M.S.A.), Doctor of Philosophy (Ph.D.), Doctor of Science (D.Sc.), Doctor of Literature (Litt.D.), Doctor of Civil Law (D.C.L.), and Doctor of Music (Mus. Doc.).

Full information as to admission and departments in which studies are offered will be found on pages 397-440.

The degree of Doctor of Laws is given only as an honorary degree.

The Course for the First Class Academy Diploma of the Province of Quebec.

Certain courses are given by the Department of Education, which when supplemented by practice teaching and observation (except in the case of holders of the Intermediate Diploma, who have already satisfied these requirements) lead to a First Class High School Diploma on graduation.

The latter diploma can also be obtained by those who qualify for the degree of B.Sc. in Agriculture by taking two years in Arts, followed by two in the Faculty of Agriculture. (See Macdonald College Announcement.)

Extension Courses.

Evening lectures on a variety of subjects. Particulars will be found in a separate Announcement.

School for Graduate Nurses.

Three courses, each covering an academic year, and leading to a certificate: (a) For Public Health Nursing: (b) Teaching in Schools of Nursing; (c) Administration in Schools of Nursing. (See pages 473-485.)

School of Physical Education.

Two-year course, leading to a diploma. Full particulars can be obtained from the Secretary of the School, Molson Hall, Arts Building. (See also pages 449-462.)

Library School.

A summer course of six weeks.

School for Social Workers.

A Diploma Course extending over two years and a Certificate Course over one. See pages 463-472.

ENTRANCE REQUIREMENTS.

JUNIOR MATRICULATION.

1. REGULATIONS.

1. Matriculation examinations (for entrance into all Faculties) are held only in June and September—in June at McGill University and local centres; in September, at Montreal only, except in cases which require special consideration.

ALL INQUIRIES RELATING TO THE EXAMINATION SHOULD BE ADDRESSED TO THE REGISTRAR OF THE UNIVERSITY.

For the convenience of candidates in Great Britain, who are not otherwise qualified for entrance, an examination will be held regularly in London, Eng., each year, commencing on or about the 12th of June. Full information regarding the exact date of the examination, fee, etc., may be obtained from the Honorary Representative of the University, W. A. Bulkeley-Evans, Esq., M.A., Secretary Headmasters' Conference, 5 Paper Buildings, Temple, London, E.C. 4.

2. Every candidate for examination is required to fill up an application form and return the same with the necessary fee (for which see page 52) one month before the examination begins. Blank forms may be obtained from the Registrar.

No application for examination in June will be received after May 20th.

3. Candidates will not be considered as having passed in any subject unless they obtain at least 50 per cent. of the maximum marks in that subject (in subjects in which two papers are set, 50 per cent. on the two and not less than 40 in either).

This regulation applies also in the case of certificates.

4. Candidates for admission to the Faculty of Arts, Applied Science, Agriculture or Music who have failed to complete the matriculation requirements will be allowed to enter the First Year as conditioned undergraduates, provided (a) that they have not failed in more than two papers (which cannot both be in the mathematical section, nor in two languages) and (b) that they have obtained at least 25 per cent. in the subjects in which they have failed and 50 per cent. of the aggregate.

This regulation applies also to candidates who seek to satisfy the matriculation requirements by means of certificates granted by other recognized examining bodies.

The condition must be removed before the student can be admitted to the Second Year. It cannot be removed, however, by passing the First year examination in the subject in which the candidate is conditioned.

Students who are conditioned in a language must attend a special tutorial class during their first seession, for which a fee of $10.00 is exigible. Any student so conditioned who fails to attend this class with regularity will not be allowed to present himself for examination.

Candidates for admission to the Faculty of Dentistry must pass in every subject required.

In order to be admitted to the Faculty of Law or Medicine, a candidate must pass the Senior Matriculation Examination, for particulars of which see page 69, or complete the First year in the Faculty of Arts.

5. Matriculation certificates will be issued to candidates who have passed the entrance examination conducted by the University, but not to those who have qualified by means of certificates, except when the greater part of the requirements has been satisfied by passing the University examination.

6. The certificates and diplomas named below will, if submitted to the Registrar, be accepted *pro tanto* in lieu of the junior matriculation examination, *i.e.*, in so far as the subjects and standard of the examination taken to obtain them are, to the satisfaction of the Matriculation Board, equivalent to those required for the matriculation examination of this University. Candidates offering certificates which are not a full equivalent will be required to pass the matriculation examination at the regular time set therefor (June or September), in such of the necessary subjects as are not covered thereby.

Intending students who wish to enter by certificates should under no circumstances come to the University without having first obtained from the Registrar a statement of the value of the certificates they hold, as many of these lack one or more essential subjects, or the work done in a subject may not be adequate, or again, the percentage gained may not be sufficiently high (see regulation 3). Moreover, it must be remembered that a certificate may admit to one Faculty and not to another. When a diploma or certificate does not show the marks obtained in the several subjects of the examination, it must be accompanied by an official statement containing this information.

Province of Quebec.

The University School Leaving Certificate.
The Intermediate School Diploma.

Province of Ontario.

Certificate of entrance to the Normal Schools.
Junior Matriculation Certificate.

Province of New Brunswick.

First Class, Superior and Grammar School Licenses.
Grades XI and XII Certificates.

Province of Nova Scotia.

The Leaving Certificate of Grade XI.

Province of Prince Edward Island.

First Class Teachers' License.
Second Year Certificate of Prince of Wales College.

Province of British Columbia.

Intermediate Grade Certificate.

Province of Manitoba.

Second Class Teachers' Certificate.
Grade XI Certificate.

Provinces of Alberta and Saskatchewan.

The Departmental Certificate of Standard XI.

Newfoundland.

Associate Grade Certificate.

United States.

Certificates granted by the College Entrance Examination Board and by the New York State Board of Regents.

Great Britain.

The holder of a Higher Certificate or a School Certificate of the Oxford and Cambridge Schools Examination Board, of the Senior Certificate of the Oxford or Cambridge Board of Examiners, of a First Class Certificate of the College of Preceptors or of a Higher Examination Certificate of the Scotch and Welsh Educational Departments is entitled to exemption from the matriculation examination, *pro tanto*, if the candidate has at one and the same examination passed in certain specified subjects.

Applications for exemption from the matriculation examination, based upon certificates of having passed examinations other than those above mentioned, will be considered as occasion may require. Every such application must be accompanied by certificates and full particulars, and should be addressed to the Registrar.

II. JUNIOR MATRICULATION EXAMINATION FEES.

For an examination in six or more papers	$7.00
(For an examination at a local centre where not more than four candidates are writing, the fee will be determined by the Registrar.)	
For an examination in from three to five papers	4.00
For an examination in one or two papers	2.00
For examination of certificates, in respect of which candidates are exempted from the whole of the matriculation examination	2.00

Matriculation examination fees must be sent to the University Registrar at the time of application for the examination. No application will be accepted unless accompanied by the regular fee.

Certificates will be issued to successful candidates without additional fee.

III. SUBJECTS OF EXAMINATION.

Faculty of Arts.

(1) *For candidates intending to take the B.A. course.*

1. **English** (two papers).
2. **History** (one paper).
3. **Latin** *or* **Greek** (two papers).
4. One of the following (two papers in each):
   Greek *or* **Latin** (the one not already chosen).
   French, German, Spanish.
5. **Elementary Mathematics** [**Algebra** (one paper) and **Geometry** (one paper).]
6. One of the following:
   Botany, Chemistry, Physics, Physical Geography (one paper); a **Language** not already chosen (two papers).
   (*Candidates are advised to choose Physics under this head*)

Holders of Intermediate Diplomas who are certified by the Dean of the School for Teachers of Macdonald College to have taken 75 per cent. of the total marks at their final examinations, with not less than 50 per cent. of the marks in (1) mathematics, (2) French, and (3) Latin or Greek, respectively, will be admitted without further examination as undergraduates of the First Year in Arts.

(2) *For candidates intending to take the B.Sc. course in Arts, or the course leading to the degree of Bachelor of Science in Agriculture or to the degree of Bachelor of Household Science (two years in Arts and two in Agriculture, or in Household Science, as the case may be).*

1. **English** (two papers).
2. **History** (one paper).
3. **French** (two papers).
4. **Latin** *or* **German** *or* **Spanish** (two papers) *or* **Physics** (one paper).
5. **Elementary Mathematics** [**Algebra** (one paper) and **Geometry** (one paper).]
6. One of the following:
   Botany, Chemistry, Physics (if not already chosen), **Physical Geography** (one paper); **Latin**—if not already chosen (two papers); **Greek** (two papers).
   (*Candidates are advised to choose Physics under this head.*)

Candidates who intend ultimately to proceed to the study of Medicine are reminded that for medical registration it is necessary to take Latin.

(3) *For candidates entering on the course for the Degree of Bachelor of Commerce.*

The ordinary matriculation examination for the B.A., or the B.Sc. Course, except that Spanish may be taken instead of French.

Faculty of Applied Science.

(*1*) *For all courses leading to the degree of B.Sc. in the different branches of Engineering.*

1. **English** (two papers).
2. **History** (one paper).
3. One of the following:
   French, German, Spanish, Latin, Greek (two papers).
4. **Elementary Mathematics** [**Algebra** (one paper) and **Geometry** (one paper).]
5. **Advanced Mathematics** [**Algebra** (one paper), **Geometry** (one paper), **Trigonometry** (one paper).]
6. One of the following:
   Botany, Chemistry, Physics, Physical Geography (one paper), a **Language** not already chosen (two papers).
   (*Candidates are advised to take Physics under this head.*)

(*2*) *For the course leading to the Degree of B. Arch.*

The same as for entrance to the Engineering Course, as shown above with Freehand and Geometrical Drawing added.

In the case of Drawing applicants may send specimens of their work to the Head of the Department or take an examination at the time of the regular matriculation examination in September. No examinations taken elsewhere are accepted as an equivalent for this subject.

No student will be admitted to the Department of Architecture as an undergraduate, until he has satisfied the matriculation requirements in this subject.

Faculty of Dentistry.

1. **English** (two papers).
2. **History** (one paper).
3. **Latin** (two papers).
4. One of the following (two papers in each):—
   French, German, Greek.

5. **Elementary Mathematics** [**Algebra** (one paper) and Geometry (one paper).]
6. One of the following:—
   Botany, Chemistry, Physics, Physical Geography (one paper).

In addition to the certificates mentioned on page 51, a certificate of having passed the preliminary examination for registration of a Provincial or State Dental Council will be accepted in lieu of the matriculation examination in this Faculty. No candidate will be admitted to the Faculty of Dentistry without having satisfied all the matriculation requirements.

Faculty of Agriculture.

1. **English** (two papers).
2. **History** (one paper).
3. **Latin** *or* **French** *or* **German** *or* **Spanish** (two papers), French preferred.
4. **Elementary Mathematics** [**Algebra** (one paper) and **Geometry** (one paper).]
5. Any one of the following:
   Botany, Chemistry, Physics, Zoology, Physical Geography (one paper).

A School Leaving Certificate of the Province of Quebec or an Intermediate Diploma, or a matriculation certificate for entrance to any other Faculty of the University will also be accepted.

Candidates, without academic training sufficient to qualify for entrance by any of the methods above, who are at least twenty years of age and possess a substantial farm experience, together with mental endowments sufficient to successfully undertake the course despite some academic handicap, may be admitted to the course by an Admission Committee, provided that students so admitted be required to obtain matriculation standing before entering the Third Year.

Opportunity for Matriculation.—A limited number of students who have not matriculation standing, but who think they might be able to obtain it after one or two years' study, can be accommodated in residence and take work at the High School, provided they are sufficiently advanced to enter Grade X or XI.

School of Physical Education.

The Subjects required for the Faculty of Agriculture, as shown above.

Faculty of Music.

The examination for entrance to the Faculty of Arts, with Rudiments of Music added, *or* the following:—

1. **English** (two papers).
2. **History** (one paper).

3. Two of the following:
   French, German, Spanish, Italian, Latin (two papers).
4. **Arithmetic** *or* **Algebra** *or* **Geometry** (one paper).
5. **Rudiments of Music:** musical intervals, scales clefs, time signatures, construction of chords, elementary harmony to chord of dominant seventh (one paper).

For requirements for entrance to Law and Medicine, see under Senior Matriculation, pp. 69–72.

IV. REQUIREMENTS IN EACH SUBJECT.

Arithmetic.

All the ordinary rules, including square root, and a knowledge of the metric system.

One examination paper.

History and Historical Geography.

For 1924.

The Groundwork of British History, editors Warner and Marten (Blackie & Sons, Edinburgh), Vol. III., complete, with appendices. Canadian History (Grant), 1763 to date.

For candidates outside of Canada an option will be allowed in this subject on British History from 1485 to 1911, same text-book as is prescribed above, Secs. II. and III.

The geography required will be that relating to the history prescribed.

An option will be allowed on the Ontario requirements in this subject.

For 1925.

West's "World Progress" (Allyn & Bacon), pp. 305 to the end.

English.

A. *Composition.* As in the Ontario High School Composition, pages 198 to the end (Copp, Clark Co.), with a short essay on a general subject and two or three others based on the works prescribed for reading, as follows:—Shakespeare, Richard II (Macmillan*); Thackeray, Henry Esmond (Macmillan); Selected English Essays (Dent).

These books should be read carefully, but the student's attention should not be so fixed upon details that he fails to appreciate the main purpose and beauty of the work.

Frequent practice in composition is essential.

B. *Literature* (for critical study).—Shakespeare, Macbeth (Copp, Clark Co.*); Poems of the Romantic Revival, pages 107 to 200 (Copp, Clark Co., Ltd., Toronto).

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*These editions are recommended, not prescribed.

Passages for memorization:—

Macbeth:—Act I, Scene IV, lines 7–11; Act 1, Scene VII, lines 1–7; Act I, Scene VII, lines 41–45; Act II, Scene I, lines 33–49; Act II, Scene II, lines 35–40; Act III, Scene II, lines 13–26; Act V, Scene III, lines 22–28; Act V, Scene III, lines 40–45; Act V, Scene V, lines 17–28.

Poems of the Romantic Revival:—

Ode to a Nightingale, lines 61–70; Songs from Pippa Passes, lines 1–8; Andrea del Sarto, lines 69–87; Asolando, lines 11–15; Morte d'Arthur, lines 247–255; Break, Break, Break, the whole; Songs from the Princess, lines 17–34; In Memoriam, lines 17–32.

Candidates will also be expected to commit to memory other passages amounting to at least 30 lines.

Two examination papers; one on Composition and the other on Literature (for critical study).

An alternative paper will be set on the work specified in English for the Junior Matriculation examination of the Province of Ontario.

Spelling will be tested by the candidates' papers in English. Examiners in other subjects will also take note of mis-spelled words and will report flagrant cases to the Board.

Greek.

Texts.—Philpotts and Jerram, Easy Selections from Xenophon, chaps. 3, 4, 5; Homer, Iliad I, lines 1 to 350.

Grammar.—Knowledge of grammar will be tested by translation and by grammatical questions based on the specified texts.

Translation at Sight from Greek into English.

Two examination papers; one on Xenophon and Composition, the other on Homer and Translation at Sight.

Alternative questions will be set on the work prescribed in Greek for the Junior Matriculation Examination of the Province of Ontario, if this differs from that specified above.

At the September examination other texts equivalent to those specified may be accepted, if application be made to the Registrar at least one month before the date of the examination

Latin.

Texts (Translation and Grammatical study)

For 1924.

Cæsar, De Bello Gallico, Book IV, chaps. 20 to 38, and Book V, chaps. 1 to 23; Virgil, Aeneid I (Wainwright, Bell's Illustrated Classics).

For 1925.

Virgil, Aeneid, Book II; Cornelius Nepos, "Lives" (Miltiades, Themistocles and Aristides). (Elementary Classics, Macmillan.)

Grammar.—Knowledge of grammar will be tested by translation and composition, and by grammatical questions based on the specified texts.

Translation at Sight from Latin into English.

Composition.—Translation into Latin of detached English sentences and easy narrative based on the prescribed texts.

Two examination papers; one on Cæsar and Composition, and the other on Virgil and Translation at Sight.

Note.—The "Roman" method of pronouncing Latin is recommended.

An alternative paper will be set on the Latin texts prescribed for the Junior Matriculation Examination of the Province of Ontario, if these differ from those specified above.

At the September examination other texts in Latin equivalent to those specified may be accepted, if application be made to the Registrar at least a month before the date of examination.

French.

Grammar.—A thorough knowledge of French accidence and of those points of syntax which are of more frequent occurrence in an ordinary easy style.

Translation at Sight into English of a French passage of moderate difficulty.

Translation at Sight into French of detached English sentences and an easy English passage. Material for such translation is selected with a view to testing the candidate's general knowledge of French grammar.

Books recommended:—Fraser and Squair's French Grammar or Bertenshaw's French Grammar (Longmans), and Cameron's Elements of French Prose Composition (Holt & Co.).

A list of French texts suitable for class reading can be obtained by applying to the Registrar.

Two examination papers; one on grammar, including translation of short English sentences into French, and one on translation of continuous passages from French into English and from English into French.

German.

Grammar.—A thorough knowledge of German accidence and syntax, as in Van der Smissen, or any other German grammar of equally good standing.

Translation at Sight into English of a German passage of moderate difficulty.

Translation into German of detached English sentences and of an easy English passage. Material for such translation is selected with a view to exemplifying the points of grammar included within the above limits.

Texts.—(Translation and grammatical study):—

For 1924.

Guerber, Mârchen und Erzählungen (Heath), omitting Nos. 3, 4, 10, 14 and Poems; Baumbach, Däs Habichts fräulein (Heath).

For 1925.

Guerber, Mârchen und Erzählungen (Heath), omitting Nos. 3, 4, 10, 14 and Poems; Storm, Geschichten aus der Tonne (Heath).

The Ontario Junior Matriculation requirements in German will be accepted in place of the texts specified above.

At the September examination other texts equivalent to those specified may be accepted, if application be made to the Registrar at least one month before the date of the examination.

Two papers; one on prescribed texts and grammar, including translation of short English sentences into German. and one on translation of continuous passages from German into English and from English into German.

Spanish.

Grammar.—Translation from English into Spanish of short sentences involving important rules of syntax; translation from prescribed books; unseen translation from Spanish into English; Spanish composition: the translation of easy continuous prose passages from English into Spanish.

Two papers; one on prescribed texts and grammar, including translation of short English sentences into Spanish and one on translation of continuous passages from Spanish into English and from English into Spanish.

Books recommended:—Elementary Spanish grammar, Sanin Cano (Oxford Press); Spanish Composition, Loiseaux (Silver, Burdett & Company).

Prescribed books:—Novelas Cortas by Alarcon (Ginn & Company); Spanish Reader, Sanin Cano (Oxford Press).

Italian.

Grammar.—A thorough knowledge of Italian accidence and of those points of syntax which are of more frequent occurrence in an ordinary easy style.

Translation at Sight into English of an Italian passage of moderate difficulty.

Translation into Italian of detached English sentences and an easy English passage. Material for such translation is selected with a view to testing the candidate's general knowledge of Italian grammar.

Books recommended:—Grandgent's Italian Grammar (Heath); Grandgent's Italian Composition (Heath); Bowen's Italian Reader (Heath).

Two papers will be set; one on grammar, including translation of short English sentences into Italian, and one on translation of continuous passages from Italian into English and from English into Italian.

Elementary Mathematics.

Algebra.—Elementary rules, involution, evolution, fractions, indices, surds, simple and quadratic equations of one or more unknown quantities; as in Hall and Knight's Elementary Algebra, to the end of surds (omitting portions marked with an asterisk), or as in similar text-books.

One examination paper.

Geometry.—The paper shall contain questions on practical and on theoretical geometry. Every candidate shall be expected to answer questions in both branches of the subject-

The questions on practical geometry shall be set on the constructions contained in the annexed Schedule A, together with easy extensions of them. In cases where the validity of a construction is not obvious, the reasoning by which it is justified may be required. Every candidate shall provide himself with a ruler graduated in inches and tenths of an inch, and in centimetres and millimetres, a set square, a protractor, compasses and a hard pencil. All figures should be drawn accurately. Questions may be set in which use of the set square or the protractor is forbidden.

The questions on theoretical geometry shall consist of theorems contained in the annexed Schedule B together with questions upon these theorems, easy deductions from them, and arithmetical illustrations. Any proof of a proposition shall be accepted which appears to the examiners to form part of a systematic treatment of the subject; the order in which the theorems are stated in Schedule B is not imposed as the sequence of their treatment.

In the proof of theorems and deductions from them, the use of hypothetical constructions shall be permitted. Proofs which are only applicable to commensurable magnitudes shall be accepted.

SCHEDULE A.

Bisection of angles and of straight lines.

Construction of perpendiculars to straight lines.

Construction of an angle equal to a given angle.

Construction of parallels to a given straight line.

Simple cases of the construction from sufficient data of triangles and quadrilaterals.

Division of straight lines into a given number of equal parts or into parts in any given proportions.

Construction of a triangle equal in area to a given polygon.

Construction of tangents to a circle and of common tangents to two circles.

Simple cases of the construction of circles from sufficient data.

Construction of a fourth proportional to three given straight lines and a mean proportional to two given straight lines.

Construction of regular figures of 3, 4, 6 or 8 sides in or about a given circle.

Construction of a square equal in area to a given polygon.

SCHEDULE B.

If a straight line stands on another straight line, the sum of the two angles so formed is equal to two right angles; and the converse.

If two straight lines intersect, the vertically opposite angles are equal.

When a straight line cuts two other straight lines, if (i) a pair of alternate angles are equal, or (ii) a pair of corresponding angles are equal, or (iii) a pair of interior angles on the same side of the cutting line are together equal to two right angles, then the two straight lines are parallel; and the converse.

Straight lines which are parallel to the same straight line are parallel to one another.

The sum of the angles of a triangle is equal to two right angles.

If the sides of a convex polygon are produced in order, the sum of the angles so formed is equal to four right angles.

If two triangles have two sides of the one equal to two sides of the other, each to each, and also the angles contained by those sides equal, the triangles are congruent.

If two triangles have two angles of the one equal to two angles of the other, each to each, and also one side of the one equal to the corresponding side of the other, the triangles are congruent.

If two sides of a triangle are equal, the angles opposite to these sides are equal; and the converse.

If two triangles have the three sides of the one equal to the three sides of the other, each to each, the triangles are congruent.

If two right-angled triangles have their hypotenuses equal, and one side of the one equal to one side of the other, the triangles are congruent.

If two sides of a triangle are unequal, the greater side has the greater angle opposite to it; and the converse.

Of all the straight lines that can be drawn to a given straight line upon a given point outside it, the perpendicular is the shortest.

The opposite sides and angles of a parallelogram are equal, each diagonal bisects the parallelogram, and the diagonals bisect one another.

If there are three or more parallel straight lines, and the intercepts made by them on any straight line that cuts them are equal, then the corresponding intercepts on any other straight line that cuts them are also equal.

Parallelograms on the same or equal bases and of the same altitude are equal in area.

Triangles on the same or equal bases and of the same altitude are equal in area.

Equal triangles on the same or equal bases are of the same altitude.

Illustrations and explanations of the geometrical theorems corresponding to the following algebraical identities:—

$$k(a + b + c \ldots.) = ka + kb + kc + \ldots$$
$$(a + b)^2 = a^2 + 2ab + b^2 \quad \ldots$$
$$(a - b)^2 = a^2 - 2ab + b^2 \quad \ldots$$
$$(a^2 - b^2) = (a + b)(a - b).$$

The square on a side of a triangle is greater than, equal to, or less than the sum of the squares on the other two sides, according as the angle contained by those sides is obtuse, right, or acute. The difference in the cases of inequality is twice the rectangle contained by one of the two sides and the projection on it of the other.

The locus of a point which is equidistant from two fixed points is the perpendicular bisector of the straight line joining the two fixed points.

The locus of a point which is equidistant from two intersecting straight lines consists of the pair of straight lines which bisect the angles between the two given lines.

A straight line, drawn from the centre of a circle to bisect a chord which is not a diameter, is at right angles to the chord; conversely, the perpendicular to a chord from the centre bisects the chord.

There is one circle, and one only, which passes through three given points not in a straight line.

In equal circles (or in the same circle) (i) if two arcs subtend equal angles at the centres, they are equal; (ii) conversely, if two arcs are equal, they subtend equal angles at the centres.

In equal circles (or in the same circle) (i) if two chords are equal, they cut off equal arcs; (ii) conversely, if two arcs are equal, the chords of the arcs are equal.

Equal chords of a circle are equidistant from the centre; and the converse.

The tangent at any point of a circle and the radius through the point are perpendicular to one another.

If two circles touch, the point of contact lies on the straight line through the centres.

The angle which an arc of a circle subtends at the centre is double that which it subtends at any point on the remaining part of the circumference.

Angles in the same segment of a circle are equal; and, if the line joining two points subtends equal angles at two other points on the same side of it the four points lie on a circle.

The angle in a semicircle is a right angle; the angle in a segment greater than a semicircle is less than a right angle; and the angle in a segment less than a semicircle is greater than a right angle.

The opposite angles of any quadrilateral inscribed in a circle are supplementary; and the converse.

If a straight line touch a circle, and from the point of contact a chord be drawn, the angles which this chord makes with the tangent are equal to the angles in the alternate segments.

If two chords of a circle intersect, either inside or outside the circle, the rectangle contained by the parts of the one is equal to the rectangle contained by the parts of the other.

If a straight line is drawn parallel to one side of a triangle, the other two sides are divided proportionally; and the converse.

If two triangles are equiangular, their corresponding sides are proportional; and the converse.

If two triangles have one angle of the one equal to one angle of the other and the sides about these equal angles are proportional, the triangles are similar.

The internal bisector of an angle of a triangle divides the opposite side internally in the ratio of the sides containing the angle, and likewise the external bisector externally.

The ratio of the areas of similar triangles is equal to the ratio of the squares on corresponding sides.

Text-books recommended:—Godfrey and Siddons' Elementary Geometry (Pitt Press, Cambridge), or Hall and Stevens' School Geometry, pp. 1-201; 219-265; 267-269; and 274-276.

An alternate paper will be set on the Ontario Junior Matriculation requirements in this subject.

One examination paper.

Advanced Mathematics.

Algebra.—The three progressions, ratio, proportion, variation, permutations and combinations, binomial theorem, logarithms, theory of quadratic equations, as in the remainder of Hall and Knight's Elementary Algebra (omitting chaps. 40 to 44 inclusive), or as in similar text-books.

One examination paper.

Geometry.

Constructions.

To draw the inscribed, escribed, and circumscribing circles of a triangle.

To construct triangles under given conditions.

To divide a given line externally and internally in medial section.

To construct an isosceles triangle, such that each of the base angles is twice the vertical angle.

To describe a regular pentagon.

To construct a polygon similar to a given polygon, and such that their areas are in a given ratio.

To construct a figure equal in area to a given figure A, and similar to another figure B.

Theorems.

If two sides of one triangle be equal respectively to two sides of another, that with the greater contained angle has the greater base; and conversely.

If a triangle is such that the square on one side is equal to the sum of the squares on the other two sides, the angle contained by these sides is a right angle.

The three medians of a triangle are concurrent.

Perpendiculars from the angles to the opposite sides of a triangle are concurrent.

The complements of parallelograms about the diagonal of any parallelogram are equal.

If the circumference of a circle be divided into n equal arcs:—

(1) The points of division are the vertices of a regular polygon of n sides inscribed in the circle.

(2) If tangents be drawn to the circle at these points, these tangents are the sides of a regular polygon of n sides circumscribed about the circle.

If $OA:OB = OC^2$, OC is a tangent to the circle through A B C.

If two triangles have an angle in each equal, and the sides about two other angles proportional, the remaining angles are equal or supplemental.

The perpendicular from the right angle of a right-angled triangle on the hypotenuse divides the triangle into two triangles which are similar to the original triangle.

The sum of the rectangles contained by the opposite sides of a quadrilateral, about which a circle can be described, is equal to the rectangle contained by its diagonals.

The squares on two sides of a triangle are together equal to twice the square on half the third side and twice the square on the median to that side.

If from the vertical angle of a triangle a straight line be drawn perpendicular to the base, the rectangle contained by the sides of the triangle is equal to the rectangle contained by the perpendicular and the diameter of the circle described about the triangle.

If the vertical angle of a triangle be bisected by a straight line which also cuts the base, the rectangle contained by the sides of the triangle is equal to the rectangle contained by the segments of the base, together with the square on the straight line which bisects the angle.

The areas of two similar polygons are as the squares on corresponding sides.

In a right-angled triangle the rectilineal figure described on the hypotenuse is equal to the sum of the similar and similarly described figures on the other two sides.

If three lines be proportional, the first is to the third as the figure on the first is to a similar figure on the second.

If the straight lines joining a point to the vertices of a given polygon are divided (all externally or all internally) in the same ratio, the two points of division are the vertices of a similar polygon.

Two similar polygons may be so placed that the lines adjoining corresponding points are concurrent.

Triangles of equal altitude are as their bases.

In equal circles, angles, whether at the centres or circumferences, are proportional to the arcs on which they stand.

If P is any point on the circumscribing circle of a triangle, ABC, and PL, PM, PN are perpendicular to BC, CA, AB, respectively, LNM is a straight line.

A point P moves so that the ratio of its distance from two fixed points, Q and R, is constant; prove that the locus of P is a circle.

Areas.

Area of a circle.
Area of a sector of a circle.
Area of a segment of a circle.

Use of Squared Paper.

Marking points.
Finding areas of rectilinear and curvilinear figures.
Examples of plotting loci; in particular, the ellipse, hyperbola, and parabola.
Examples of loci and envelopes.

Deductions and Applications.

Deductions from and simple applications of the constructions and theorems given above.

Text-book:—Godfrey and Siddons' Elementary Geometry (Pitt Press, Cambridge), or Hall and Stevens' School Geometry, pp. 202-212, 266-269, 280-310, 319-322, and also in Godfrey and Siddons, pp. 143-153 and 288-294.

An option will be set in Geometry on the work prescribed for Honour Matriculation in the Province of Ontario.

One examination paper.

Trigonometry.—Measurement of angles, trigonometrical ratios or functions of one angle, of two angles, and of a multiple angle; as in Lock's Elementary Trigonometry, Chaps. I to XII; Hall and Knight's Trigonometry, Chaps. I to XII, inclusive, omitting Chap V. or as in similar text-books.

Chemistry.

Elementary inorganic chemistry, comprising the preparation and properties of the chief non-metallic elements and their more important compounds, the laws of chemical action, combining weight, etc.

Text-book:—"Elementary Chemistry for High Schools, " by Nevil Norton Evans (Educational Book Company, Limited, Toronto), Chaps. I to XVI inclusive.

One examination paper.

Physics.

Properties of matter; elementary mechanics of solids and fluids, including the laws of motion, simple machines, work, energy; fluid pressure and specific gravity; thermometry, the effects and modes of transmission of heat.

Text-book recommended:—High School Physics, by Merchant and Chant, Parts I, II, III, IV, and VI, pages 1, to 156, inclusive; and 214 to 286, inclusive, or the equivalent in other text books.

One examination paper.

Physical Geography.

Tarr's New Physical Geography, Chaps. I to XIV and Appendices A to H, inclusive.

One examination paper.

Botany.

Students are required to pass in both Part A and Part B.

PART A.

The Plant Cell:—the cell-wall; the cytoplasm; the nucleus; the chloroplasts in green cells; movements of cytoplasm.

Seeds: structure; modifications which aid in dispersal; nature of the stored food; the digestion of foods by means of enzymes; germination.

Seedlings: different types; the relation of growth to temperature, light and moisture.

Roots: structure; region of growth; osmosis; the absorption of water and solutions of mineral nutrients; modifications, especially in connection with the storage of foods.

Stems: structure of the principal types; growth in length and thickness; the transfer of water and of mineral nutrients from roots to leaves; the transfer of prepared foods from leaves to other parts of a plant; the storage of food in stems; the making of maple sugar; climbing and twining stems; other modifications of stems; pruning.

Leaves: structure; photosynthesis; transpiration; adjustments to light; daily movements; modifications.

Respiration: Experiments as in Eikenberry.

Buds.

Propagation by vegetative or asexual means, both natural and artificial: tubers; bulbs; stolons; runners; grafting; layering; budding.

Flowers: structure and arrangement of organs in the principal types; the functions of the different parts; self-pollination and cross-pollination; fertilization.

Fruits: structure of the principal types; modifications which assist in dispersal.

Plant Societies and special adaptations to environment:

Forests: forestry; timbers.

PART B.

A study of the principal groups of plants, emphasizing the evolution of complex from simple forms, the division of labor and the evolution of organs, the origin and evolution of sex and certain economic relations.

Bacteria: form, size, structure, motility, reproduction; relation to soil fertility; the root-nodules of the pea family and rotation of crops; relation to decay; relation to dairy products, sterilization and canning; relation to disease.

Fresh water algæ:

1. *Pleurococcus*, a unicellular green plant found growing on tree trunks, undifferentiated, without sexual reproduction, increasing by fission only.

2. *Spirogyra*, a filamentous green plant with a very simple type of sexual reproduction by means of similar germ-cells.

3. *Oedogonium*, a filamentous green plant with a higher type of sexual reproduction, by means of differentiated ova and sperms.

Higher fungi:—A black bread mold (Rhizopus); a downy mildew; the yeast plant and alcoholic fermentation; a blue mold; the corn-smut; wheat-rust; a mushroom; a wood-destroying fungus. In connection with the fungi, consideration is to be given to parasitism and saprophytism, the relations of dependent plants and their hosts; and common plant diseases and their prevention.

Lichens: one common lichen such as Parmelia, Umbilicaria Cladonia. Symbiosis.

Liverworts:—structure; life-history and alternation of generations; the origin of epidermis and stomata; the progressive development of the sporophyte, using Riccia, Marchantia and Anthoceros.

Mosses:—life-history and structure of a common moss, such as Polytrichum; peat-bogs and peat.

The Ferns and their Allies (Pteridophytes): structure and life-histories of a fern, an equisetum, a lycopod and a selaginella; the origin of roots and the development of a fibro-vascular system; alternation of generations and the increasing importance of the sporophyte; Pteridophytes of past ages; coal.

Seed-plants:—

1. *Gymnosperms:*—structure and life-history of a pine; the origin of the seed-habit; pulp; timber; gymnosperms of past ages.

2. *Angiosperms:*—the structure and life-history of at least one monocotyledon, for example, the trillium, and of one dicotyledon such as the bean.

3. A brief study of leading *agricultural and horticultural plants.*

Regional distribution.

Plant-breeding: A brief consideration of the underlying principles and methods.

Text-books:—"Practical Botany," by Bergen and Caldwell, to be used with "Problems in Botany," by W. E. Eikenberry, a laboratory manual for the guidance of teachers. Any other modern text-book covering similar ground may, however, be used.

One examination paper.

SENIOR MATRICULATION.

For admission to Second Year Arts (B.A. Course) or the Faculties of Law or Medicine.

SUBJECTS OF EXAMINATION.

English.
Latin *or* **Greek.**
Mathematics *or* **a third foreign language.**

Any three of the following:—

1. **History.**
2. **Latin** *or* **Greek** (the one not already taken).
3. **French.**
4. **German.**
5. **Science (Physics** *or* **Chemistry or Biology).**

For admission to Second Year Arts (B.Sc. Course) or the Faculties of Law or Medicine.

1. **Chemistry.**
2. **English.**
3. **French.**
4. **German.**
5. **Mathematics.**
6. **Physics.**

Those who choose this examination for admission to Law or Medicine must also pass in Junior Matriculation Latin.

This examination may be taken in two parts, but a candidate must complete the requirements within two years from the date of the first attempt.

Commencing with the session 1924-25, two years in Arts will be required for admission to the Faculty of Law.

Those who intend to practise medicine in any of the Provinces of Canada will obtain information regarding registration and admission to study by corresponding with the Registrars of the several Provincial Medical Councils. (For names, see page 280.)

Candidates who intend to practise law or to be admitted to the notarial profession in the Province of Quebec are referred to the statutory requirements as given in the special bulletin of the Faculty. If they are not graduates they should pass the examination for admission to study required by the Council of the Bar or by the Board of Notaries, as the case may be, before seeking to enter.

REQUIREMENTS IN EACH SUBJECT.

(*For the Year 1924*)

Biology.

Text-books:—Conn, H. W., (Silver, Burdett & Co.), Chaps. 1 to 10, inclusive, and Spirogyra, Mucor, and a fern.

In addition, a certificate will be required, signed by the Headmaster of the school attended, to the effect that the candidate had regularly carried out the necessary laboratory work on the course indicated.

Chemistry.

Text-books:—Alex. Smith, General Chemistry; or Macpherson and Henderson, General Chemistry, as for Second Year Arts.

English.

Composition.—The examination will be designed mainly to test the candidate's ability to write English. He will be expected to have acquired a fairly clear and accurate style, to be able to arrange material in an effective fashion, and to show discrimination in the choice of words. In preparation for the examination, it is suggested that students be required to write mainly on simple, expository subjects that are within the range of their actual experience.

Carpenter's Rhetoric and English Composition (Macmillan) is recommended as a suitable text-book.

Literature.—The examination will be based on the following texts:—Chaucer's Prologue to the Canterbury Tales; Spenser's Faerie Queene, Book 1, Cantos 1 and 2; Shakespeare's Macbeth and As You Like It; Milton's Minor Poems (L'Allegro, II Penseroso, Lycidas and Comus); and Bunyan's Pilgrim's Progress, Part. I.

Candidates will also be expected to read Long's English Literature (Ginn & Co.), Chapters I-VII, inclusive, with special emphasis on the portions most closely connected with the foregoing list of books.

French.

(1) *For B.A. Course.*

Vreeland & Koren, French Syntax and Composition (Holt); Super, Histoire de France (Holt); About, Roi des Montagnes (Heath); Erck-

mann-Chatrian, Waterloo (Heath); Mérimée, Quatre Contes (Holt); Bruce, Récit et Contes de la Guerre de 1870 (Holt); Augier, Le Gendre de Monsieur Poirier (Heath.)

(2) *For B.Sc. Course.*

The requirements for Junior Matriculation as on page 20, and in addition, Bowen's First Scientific French Reader (Heath).

German.

(1) *For the B.A. Course.*

Van der Smissen und Fraser, High School German Grammar (Copp, Clark Co.); Heyse, Die Blinden (Holt); Stern, Geschichten von deutschen Stadten (American Book Co.); Storm, In St. Jurgen (Holt.)

(2) *For the B.Sc. Course.*

The requirements for Junior Matriculation (page 20), or the course in Beginners' German (see Arts Announcement).

Greek.

Homer, Iliad XXII (Pitt Press Series, Camb, Univ. Press); Lysias pp. 30-92, in Shuckburgh's Lysias, Orationes (Macmillan.)

N.B.—Although the above editions are suggested others may be used.

The examination will include a paper on grammar, composition, and sight translation.

One of the following books is recommended for grammar:—First Greek Grammar, Rutherford (Macmillan); Goodwin's Greek Grammar (Ginn & Co.).

History.

Either (1) Greek and Roman History from 500 B.C. to 476 A.D.

Text-books recommended:—Bury, History of Greece (Macmillan); Pelham, Outlines of Roman History (Rivington); Stuart Jones, The Roman Empire (F. Unwin); Herodotus VII and VIII (Everyman); Plutarch, Lives of Pericles, Fabius Cunctator, Caius Gracchus, Marius, Cæsar; Gibbon, chap. I. (Everyman.)

Or (2) English History from the Conquest to 1900.

Text-Books recommended:—Green's Short History; Keating and Frazer, History of England for Schools, with Documents, &c. (Black); G. B. Adams, Introduction to Constitutional History of England; Seeley, Expansion of England.

Latin.

Virgil, Aeneid III (Sidgwick, Camb. Univ. Press, edition with vocabulary); and Cicero, In Catilinam I, III, IV.

The examination will include a paper on grammar, composition, and sight translation.

The grammar recommended is New Latin Grammar by Sonnenschein (Oxford Clarendon Press.)

Mathematics.

Plane and Solid Geometry.—The equivalent of Books IV, VI and XI of Euclid, with supplementary matter from Hall and Stevens' Euclid.

Algebra.—Hall and Knight's Elementary Algebra (omitting chapters 40-42, inclusive), or the same subject matter in similar text-books.

Trigonometry.—Hall and Knight's Elementary Trigonometry to page 210 and chapter 19; nature and use of logarithms (Bottomley's four-figure tables.)

Physics.

A general knowledge of the more important principles of elementary physics will be required.

Text-book:—Kimball, College Physics (Henry Holt & Co., New York, 1912.)

The student's notebook, setting forth his own laboratory work, certified by the Instructor and Headmaster of the School, must be forwarded to the Registrar for the examiner's valuation. Unless this is done, an examination on practical physics will have to be taken.

SENIOR MATRICULATION EXAMINATION FEES.

For an examination in seven or more papers	$15.00
(For an examination at a local centre where not more than four candidates are writing, the fee will be determined by the Registrar.)	
For an examination in from three to six papers	9.00
For an examination in one or two papers	4.00

ADMISSION TO ADVANCED STANDING.

A student of another university applying for exemption from any subject or subjects which he has already studied is required to submit with his application a Calendar of the University in which he had previously studied, together with a complete statement of the course he has followed and a certificate of the standing gained therein.

The Faculty concerned, if otherwise satisfied, will decide what examination, if any, or what other conditions may be necessary before admitting the candidate.

PHYSICAL EXAMINATION, VACCINATION AND HEALTH.

In order to promote as far as possible the physical welfare of the student body, every student, coming to the University for the first time, will be required to pass a physical examination to be conducted by, or under the direction of, the Director of the Department of Physical Education, or by a recognized representative. Students of the Second Year, as well as those of all years who wish to engage in athletic activities, are also required to be physically examined. The hours for this examination will be announced at registration.

By such examination physical defects and weaknesses may be discovered. If such defects and weaknesses are amenable to treatment by corrective gymnastics, special exercise will be prescribed and instruction provided. The students will be advised as to what forms of exercise will be likely to prove beneficial or harmful.

Students who do not present themselves for this examination (or otherwise satisfy the Director) before November 1st, will not be allowed to attend the University.

Re-examinations will be held frequently throughout the session for those students who are of low category, or who are suffering from physical disabilities.

All students entering the University for the first time are required to present a certificate, or other satisfactory evidence, of successful vaccination, failing which, they shall at once be vaccinated in a manner satisfactory to the medical examiner.

Provision is made by the Department for the care of the health of undergraduate students during the session. Hospital accommodation is provided for seven days only, except under special circumstances. A leaflet concerning this service and the general work of the Department, together with the requirements in physical education for all students, will be distributed at the opening of the session.

AGE OF ADMISSION.

Except under special circumstances, no student under the age of sixteen is admitted to the First Year courses in Arts, Applied Science or Medicine, or under the age of seventeen to the Second Year, and no student under the age of eighteen is admitted to the course in Law.

CLASSES OF STUDENTS.

There are four classes of students in the University:

(1) Graduates—students who have previously obtained an ordinary degree at McGill, or elsewhere, and who are now pursuing courses for the Master's degree (in Arts, Applied Science or Law), or for the degree of Ph.D.

(2) Undergraduates—students who have passed the matriculation examination and, in the case of Second, Third and Fourth Year students, all the examinations of their course in the Years below that in which they are registered.

(3) Conditioned undergraduates—those with defective entrance qualifications or who have failed in one or more of the subjects of their course in the Year below that in which they are registered.

(4) Partial students—comprising all those who, not belonging to one of the above classes, are taking a partial course of study in the University. In order to obtain admission, such students must pass the matriculation examination in the subject, or subjects, which they wish to take, or, failing this, must be able to satisfy the Head of the Department concerned that they are qualified to proceed with the courses.

REGISTRATION AND ATTENDANCE.

1. REGISTRATION.

Students will register for the Session 1923–24 as follows:—

Students in Law and Music	Registrar's Office, Sept. 10th–14th.
Students in Medicine, Dentistry and Pharmacy.	" " " " 17th–21st.
Students in Arts, First Year	" " " 27th and 28th.
Students in Arts, other Years	Molson Hall, Sept. 27th and 28th.
Students in Applied Science, First Year.	Registrar's Office, Sept. 24th–28th.
Students in Applied Science, other Years.	Engineering Building, Sept. 27th and 28th.
All other Students.	Registrar's Office, Sept. 24th–28th.

The complete regulations regarding registration are as under:—

1. Candidates entering on any course of study in the University, whether as undergraduates, conditioned undergraduates, partial students or graduate students, are required to attend at the office of the Registrar some time during the seven week days preceding the commencement of lectures, except the last (on which day no registrations will be accepted), in order to furnish the information necessary for the University records (unless this has been previously supplied), and to register for the particular classes which they wish to attend.

In the case of the Faculty of Arts, however, the registration of First Year undergraduates and conditioned undergraduates will be restricted to the two days appointed for the registration of students who had been in attendance before, as specified in Section 2.

2. On two special days during the week before the opening of the session, students who had been previously enrolled in Arts or Applied Science shall register for particular subjects in such place, or places, as may be designated by the Registrar, it eing understood, however, that students in Applied Science who have completed the work of the lower year, or years, will be free to register in the Registrar's office during the three

preceding days. These special days must be so selected that at least one week-day shall intervene between the last day for registration and the commencement of lectures.

In the case of students previously enrolled in the Faculties of Law, Medicine, Dentistry or Music, registration will be carried out in the Registrar's office during the seven week days, except the last, preceding the commencement of lectures in the Faculty concerned.

3. Students of all years above the First will be allowed to register after the official registration days only on payment of a fee of $5.00 during the first week of the session, and of $10.00 during the second. After the fifteenth day of the session no student will be admitted, except by special permission of the Faculty concerned.

This fee will not be refunded, except for satisfactory reasons and by authorization of the Faculty concerned.

4. No student will be allowed to register for a course from which he is barred by the matriculation regulations or the rules of the Faculty, except with the permission of the Matriculation Board or the Registration Committee of that Faculty, or (in the absence of such a committee) the Dean, or his authorized representative, as the case may be.

5. Upon registering, each student will be given cards of admission to the courses registered for, on presentation of which to the several instructors, his name will be entered on the class registers, or notification will be sent to the instructors by the Registrar, as may be found most convenient.

6. Students desiring to make changes in their choice of studies must make application to the Registrar to do so on a regular form. If this is in accordance with the regulations the change, or changes, will be made, otherwise the applicant must receive the endorsation of the Registration Committee or the Dean, as the case may be, whereupon due notice will be sent to all parties concerned.

For every change in registration which is not absolutely necessary a fee of $2.00 will be charged. After the fifteenth day of the session no change will be allowed under any circumstances whatever, unless it is approved by the Faculty concerned.

2. ATTENDANCE.

1. Students are required to attend at least seven-eighths of the total number of lectures in any one course.* Those whose unexcused absences exceed one-eighth of the total number of lectures in a course shall not be permitted to come up for the regular examination in that course, and those whose unexcused absences have exceeded one-fourth of the total number of lectures in any course must repeat the work in that course.

Excuses on the ground of illness or domestic affliction shall be dealt with only by the Deans of the respective Faculties.

It is to be clearly understood that excuses for absences in excess of one-eighth will be entertained only in cases of serious illness (which must be vouched for by a proper medical certificate), domestic affliction, and such other cases as are provided for by special regulations of the Faculty. Medical certificates covering absences must be presented at the Dean's office by the student immediately after his return to University work. Such certificates will be filed, and, if acceptable, the Dean shall give the student a statement certifying to the absences covered.

2. A record shall be kept by each professor or lecturer, in which the presence or absence of students shall be carefully noted. This record shall be submitted to the Faculty when required.

3. Credit for attendance on any lecture or class may be refused on the grounds of lateness, inattention, neglect of study, or disorderly conduct in the class room or laboratory. In the case last mentioned the student may, at the discretion of the Professor, be required to leave the room. Persistence in any of the above offences against discipline shall, after admonition by the Professor, be reported to the Dean of the Faculty concerned. The Dean may, at his discretion, reprimand the student, or refer the matter to the Faculty at its next meeting, and may in the interval suspend from classes.

4. Lectures will commence at five minutes after the hour, on the conclusion of the roll call. After the commencement of a lecture students are not allowed to enter, except with the permission of the Professor. If permitted to enter, they will, on reporting themselves at the close of the lecture, be marked "late." Two lates will count as one absence. Lectures end at five minutes before the hour.

In cases where it is impracticable to record late attendance, students who are not present at the commencement of these lectures will be marked absent.

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*Physical education is included under this regulation.

STUDENTS' EXPENSES.

1. BOARD AND RESIDENCE.

No college residences have as yet been erected for men students, but dormitory accommodation for about 60 is provided in Strathcona Hall, the home of the Student Christian Association of McGill University. Full particulars concerning terms of residence, etc., may be obtained from the Secretary of the Association, 348 Sherbrooke Street West, Montreal, who will also make arrangements to have students who are strangers to the City met on arrival and helped to secure lodgings, if due notice is sent of the station and time at which they will arrive.

Information about boarding and lodging houses may be had on application to the Secretary at Strathcona Hall. A list of suitable houses is prepared about a fortnight before the opening of the session each year. Owing to frequency of change, this list is not mailed.

Women students may board and reside either in private houses or in the Royal Victoria College, which provides, in addition to separate lecture rooms, residential accommodation for the women students of the University. The expense of board and residence for the session in the Royal Victoria College is $500. Further particulars will be furnished by the Warden.

Board and lodging can be obtained in private houses in the vicinity of the University buildings at a cost of from $60 and upwards per month; or, separately, board at $45 to $55 per month, rooms from $15 to $20 per month.

Board is furnished in the McGill Union at low rates. The dining room, which is a special feature of the Union, will accommodate over 120 students at a time. There is also a lunch counter where meals are served *à la carte*.

2. APPROXIMATE ESTIMATE OF COST OF COURSE.

Faculty of Arts (Men.)

(In all Years except the last the session extends from October 1st to May 15th.)

	Minimum	Moderate
Tuition Fees	$100	$100
Fee for Athletics, Union, etc	12	12
Board and Lodging	450	550
Books and Apparatus	25	30
	$587	$692

Faculty of Applied Science.

(In all Years except the last the session extends from October 1st to May 1st.)

	Minimum	Moderate
Tuition Fees	$205	$205
Fee for Athletics, Union, etc	12	12
Board and Lodging	450	550
Books and Instruments	40	50
	$707	$817

Students attending summer courses, required in certain years, for an additional period of one month, will have to spend from $60 to $70 extra in those particular years.

Faculties of Medicine and Dentistry.

(In all Years except the last the session extends from October 1st to May 20th)

	Minimum	Moderate
Tuition Fees	$200	$200
Fee for Athletics, Union, etc	12	12
Board and Lodging	460	560
Books, Instruments, etc. (in Medicine)*	150	170
	$822	$942

Undergraduates in Arts residing in affiliated theological colleges, with a view to a course in theology, are able to obtain board and lodging for less than the minimum shown above, and in all Faculties the expense under the head of "Books and Instruments" can be reduced by purchasing these at second-hand.

It will be noticed that in the above estimate no account is taken of personal expenses, such as cost of clothes, laundry, etc., nor yet of the caution money deposit which is made by each student at the commencement of the session. This amounts to $5.00 in the Faculty of Law and $10.00 in the Faculties of Arts, Medicine and Applied Science. It might be well also to reckon on at least $20.00 to $25.00 per annum for subscriptions of various kinds.

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*The cost of instruments and material in Dentistry for First Year students is at least $40.00 and for Second Year students $350.00. These instruments are practically all that will be needed in an ordinary dental practice.

SCHOLARSHIPS, MEDALS AND PRIZES.

ENTRANCE SCHOLARSHIPS.

The P. S. Ross Exhibition.

This exhibition of the value of $100.00, was founded by Mr. P. D. Ross, B.A.Sc., in memory of his late father, Mr. P. S. Ross, and is given through the Ottawa Valley Graduates' Society. It is awarded annually to the candidate from the Ottawa Valley for entrance to any Faculty, who obtains the highest percentage at the June matriculation examination, and attends the University during the ensuing session. Candidates must apply before July 1st.

The Ottawa Valley Graduates' Society's Exhibition.

This exhibition, of the value of $100, will be awarded annually to the candidate from the Ottawa Valley for entrance to any Faculty who obtains the second highest percentage at the June matriculation examination and attends the University during the ensuing session. Applications must be made before July 1st.

The Sidney J. Hodgson Exhibitions.

These exhibitions were founded by Arthur J. Hodgson, Esq., in memory of his late son, Sidney James Hodgson, a student of the First Year in Arts, who was killed in action on September 27th, 1918, while serving in the 66th Battery of the Canadian Field Artillery. One of these exhibitions is of the value of $125, tenable in the Faculty of Arts, and another of the value of $300, tenable in the Faculty of Applied Science or of Medicine. They are open to pupils of the Westmount High School who have been in attendance for at least one year, and will be awarded on the result of the June matriculation examination to the two pupils who obtain the highest percentage on the subjects required for entrance to the Faculty of Arts, Applied Science or Medicine, as the case may be, and who attend the University during the ensuing session, provided however, that they have not been awarded another exhibition of higher value.

Bursaries Granted by the Imperial Order of the Daughters of the Empire.

These bursaries are of the annual value of $250.00, are tenable for four years at any university and are open to the sons and daughters of deceased and permanently disabled soldiers and sailors. One is available for each Province each year.

Full information can be obtained by writing to the Head Office of the Order for Canada, 238 Bloor Street East, Toronto, Ont.

Scholarship Granted by the Graduates' Society of the District of Bedford.

This scholarship, of the value of $120, will be awarded annually to a "matriculated student in Arts whose parents reside in the District of Bedford, and whose candidature has been approved by a committee of the Society."

Narcissa Farrand (Mrs. N. Pettes) Scholarship.

This scholarship, of the value of $300 ($150 for two years), founded by Mr. and Mrs. H. V. Truell, of Sweet Acre, Knowlton, Que., and endowed by them with the sum of $7,000 out of the Narcissa Farrand Fund, will be awarded annually to the candidate from the Eastern Townships who obtains the highest marks at the Arts matriculation examination in June, and who has had his domicile in the Eastern Townships for five consecutive years immediately preceding the examination. Intending competitors must apply to the Registrar before July 1st each year.

The Trafalgar Scholarship.

This scholarship was founded in 1913 by certain friends and former pupils of Miss Grace Fairley, to signalize her long and faithful service to education in Montreal, and particularly as head of the Trafalgar Institute. It is of the value of $135, is tenable for one year only, and will be awarded annually to the student of Trafalgar Institute who obtains the highest marks in the June matriculation examination and matriculates as an undergraduate in the Faculty of Arts.

Scholarship for Holders of Intermediate Diplomas.

A scholarship of $150 is offered annually in the Faculty of Arts to holders of Intermediate diplomas obtained after a course of study in Macdonald College, under the following conditions:—

(1) Candidates must apply through the Dean of the School for Teachers before May 1st.

(2) They must satisfy the entrance requirements of the Faculty of Arts and declare their intention to proceed to a First Class High School diploma following the course prescribed by the University.

The scholarship will be awarded on the academic subjects of the examination for the Intermediate diploma; but although the practice marks will not be taken into account directly, the opinion of the Macdonald College staff as to the general fitness of the applicant for a University course will be considered. In case there is no applicant from the graduating class in any year, applications from graduates of previous years will be considered on their merits.

Holders of this scholarship will be permitted to count practice teaching and post-graduate work towards the fulfilment of their agreement to teach for a period of three years in the Province of Quebec.

The Sir William Macdonald Entrance Scholarships in Arts.

The following scholarships, endowed by the late Sir William Macdonald, tenable in the Faculty of Arts, and open to men only, will be offered for competition in June each year:—

Five scholarships, of the value of $150.00 each (three open only to candidates not residing on the Island of Montreal), will be awarded on the result of the matriculation examination in June.

Application must be made before July 1st.

University Entrance Scholarships in Arts.

Three scholarships of the value of $100 each and two of the value of $75 each (one of each value open only to candidates not residing on Montreal Island) will be offered to candidates for entrance to the Faculty of Arts, and will be awarded on the result of the matriculation examination in June.

Application must be made before July 1st.

Royal Victoria College Entrance Scholarships.

Two scholarships, open to women only and conditional on residence in the Royal Victoria College, are offered each year, one of the value of $200 and one of $100. These will be awarded on the result of the matriculation examination. Application must be made to the Registrar before July 1st.

The Hon. Robert Jones' Scholarship.

THE HON. ROBERT JONES' SCHOLARSHIP, having a value of One Hundred and Twenty-five Dollars ($125.00) per annum, "is granted from time to time to some poor student for the full term of study in the Faculties of Arts and Applied Science."

Application for this scholarship should be made through the Dean of the Faculty of Arts. In awarding the scholarship the standing of the student in the matriculation examination will be considered, and the scholarship will not be continued if the standing of the student at any time during his course proves to be unsatisfactory.

The Robert Bruce Bursaries and Scholarships.

Under the will of the late Robert Bruce, of the City of Quebec, provision has been made for the establishment of Bursaries and Scholarships in McGill University.

The Bursaries are of $100 in value, and will be open to "young men and women of promising abilities but of straitened circumstances who have qualified for entrance and are taking a course of study in Arts or Science."

Two sets of Scholarships have also been established; one open to candidates for entrance to the University, of the value of $100, tenable for one year, and to be awarded for high standing at the Matriculation Examination; and the other for high standing in the examinations at the end of the Second Year. The latter will be of the value of $100 a year for three years, or as much of that time as is necessary for the student to complete his course.

For the first twenty-five years students of Scottish extraction will be given the preference.

The Isabella C. MacRae Scholarship.

By the bequest of $3,021.17 from the late Isabella C. MacRae, a Scholarship has been founded, open to residents of Maxville, Ont. who have satisfied the requirements for entrance to McGill University. Should there be no applicants from this locality for six years, the Scholarship will be open to any resident of Ontario.

SCHOLARSHIPS IN ARTS.

GENERAL REGULATIONS.

1. No student can hold more than one scholarship at the same time.
2. Scholarships will not necessarily be awarded to the candidates who have obtained the highest marks. An adequate standard of merit will be required.
3. If in any College Year there be not a sufficient number of candidates showing adequate merit, any one or more of the scholarships offered for competition may be given to more deserving candidates in another year.
4. A successful candidate must, in order to retain his scholarship, proceed regularly with his college course to the satisfaction of the Faculty.
5. The annual income of the scholarships will be paid in four instalments, viz:—In October, December, February and April, about the 20th of each month.

ENTRANCE SCHOLARSHIPS.

For scholarships awarded on the result of the Matriculation Examination see pages 84-87.

SCHOLARSHIPS IN ARTS AWARDED ON THE RESULT OF THE SESSIONAL EXAMINATIONS.

THE JANE REDPATH SCHOLARSHIP.—Founded by the late Mrs. Redpath, of Terrace Bank, Montreal, for the maintenance of a scholarship in Arts. It will be awarded on the result of the sessional examination of the First Year to the student who makes the highest average on the year's work. Value of scholarship, $115.00.

THE BARBARA SCOTT SCHOLARSHIP.—Founded by the will of the late Barbara Scott to form an annual scholarship for the student "excelling in Classics in the First Year," Value, $115.00.

THE JAMES DARLING MCCALL SCHOLARSHIP.—This scholarship was founded by J. T. McCall, Esq., in memory of his son, James D. McCall, B.Sc., who was drowned shortly after the close of the war, in which he had served with distinction. This scholarship will be awarded each year to a male student of the Third Year Arts who has "given proof of scholarship and ability as an honour student in the subject of English and Philosophy." It is of the value of $275.00.

THE CHARLES WILLIAM SNYDER MEMORIAL SCHOLARSHIP.—This scholarship has been founded by L. P. Snyder, Esq., in memory of his son, Charles William Snyder, a student of the First Year Arts, who was killed in the Battle of Sanctuary Wood on June 2nd, 1916. It is of the value of

$250.00 and will be awarded annually on the result of the examination in English and Economics of the Second Year, and is subject to the conditions that the holder take an honour course in English, with Economics as a minor subject, in his Third Year, or the Honour Course in English and Economics, should such be established. It is open to male students in the Faculty of Arts professing the Christian religion.

MACKENZIE SCHOLARSHIPS.—Four scholarships, known as the Mackenzie Scholarships, are awarded annually in the Department of Economics and Political Science. Two of these, of the value respectively of $100 and $50, tenable for one year, are awarded on the result of the Second Year examination on Political Economy (Economics, Course 1), but no student is eligible who has not completed the work of this Year. The tenure of the scholarships is conditional upon the holders pursuing their studies in the honour work in Economics and Political Science of the Third Year. The other two scholarships, of the value respectively of $100 and $50, are awarded on the result of the honour examination of the Third Year in Economics and Political Science. The scholarships will not be awarded except on satisfactory evidence of merit; their tenure is conditional upon the holders pursuing their studies in the honour work in Economics and Political Science of the Fourth Year.

A Fourth Year Mackenzie scholarship may be held by a student who holds another; a Third Year scholarship cannot.

THE SIR WILLIAM DAWSON SCHOLARSHIP.—Given by the New York Graduates Society, value $60.00.

THE DR. BARCLAY SCHOLARSHIP.—Awarded in the Classical Department, value $50.00.

THE HOUSTON SCHOLARSHIP.—Founded by the will of the late Thomas Houston, for the purpose of establishing a scholarship for French students studying for the Presbyterian ministry. It is open only to undergraduates in the Faculty of Arts under the above restriction and will be awarded on the result of the sessional examination without regard to Year. The value of the scholarship is about $60.00.

PRESBYTERIAN COLLEGE SCHOLARSHIPS.—The Board of Management of the Presbyterian College offers a number of scholarships for the payment of fees of undergraduates in Arts who are registered at the Presbyterian College as in training for the study of theology with a view to the ministry and who have creditably passed the sessional examinations. For further information, application should be made to the Registrar, the Presbyterian College, Montreal.

CONGREGATIONAL COLLEGE SCHOLARSHIPS.—The Board of Governors of the Congregational College provides maintenance scholarships for its students taking the Arts course in McGill, also fee scholarships for creditable standing in the sessional examinations, as well as special prizes as rewards for superior excellence. For particulars, application should be made to the Registrar, The Congregational College, Montreal.

SCHOLARSHIPS IN ARTS AWARDED ON THE RESULT OF A SPECIAL EXAMINATION IN SEPTEMBER.

SECOND YEAR SCHOLARSHIPS IN ARTS.*

Six scholarships, ranging in value from $100 to $150 each, will be offered for competition to students entering the Second Year, in September, 1923.

The subjects of examination are divided into groups as follows:—

Group I.—Greek, Latin, French, German, English.

Group II.—Mathematics, Physics.

Candidates are required to offer two major subjects and one minor subject. The two major subjects must be selected from the same group, the minor subject from either group, the examination in the major subject being more extensive than that in the same subject presented as a minor subject. Two scholarships of $150 each and two of $100 each are offered to candidates taking their major subjects from Group I, and one of $150 and one of $100 to candidates taking their major subjects from Group II.

One of these scholarships is "The Charles Alexander Scholarship," for men only, and is awarded for "classics and other subjects."

The above scholarships are open to all undergraduates in Arts, whether they are taking the B.A. or the B.Sc. course.

The requirements in each subject are published in a separate pamphlet which can be obtained at the Registrar's Office.

Application for these scholarships must be sent to the Registrar before July 1st.

THIRD YEAR SCHOLARSHIPS IN ARTS.†

The following five scholarships, of the value of $300 ($150 per year for two years), will be open for competition to students entering the Third Year in September, 1923.

One for English and another language.

One for Latin or Greek and another language‡ (English excepted).

One for French or German and another language‡ (English excepted).

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*Second Year Scholarships are open to students who have passed the First Year sessional examinations, provided that not more than two sessions have elapsed since their admission to the University.

†Third Year Scholarships are open to students who have passed the Second Year sessional examination, provided that not more than three sessions have elapsed since their admission to the University; and also to candidates who have obtained what the Faculty may deem equivalent standing in some other university, provided that application be made before the end of the session preceding the examination. Double course students (Arts and Applied Science or Arts and Medicine) are not eligible for these scholarships.

‡The language not chosen in the first instance may be taken as the second language.

Two for Mathematics and Physics.

Of the above five scholarships, two are known as "Sir William Macdonald Scholarships" and are open to men only.

In addition to the above, the three following scholarships, of the value of $150 each, are also offered for competition to students entering the Third Year:—

One for Philosophy and Psychology.

One for Chemistry and Physics.

Of the above two scholarships, one is called a "Sir William Macdonald Scholarship" and is open to men only.

One for Biology.

This scholarship shall be called "The Major Hiram Mills Scholarship." It is open to both men and women.

A bursary of $25 will be awarded to that one of the holders of these scholarships who is considered most deserving on entering the Fourth Year.

An exhibition of $80, to be known as the Hannah Willard Lyman Exhibition, will also be awarded annually in the Fourth Year, to the best woman student who may have been the holder of a Third Year scholarship in biology or chemistry or philosophy. Should there be no sufficiently deserving candidate, this exhibition may be awarded at the beginning of the Third Year to a woman candidate who may fail to obtain one of the five regular scholarships offered to Third Year students.

In the award of Third Year scholarships, the Second Year standing of candidates, in the subjects selected, will be taken into account.

In the event of no candidate of sufficient merit presenting himself, the scholarship assigned to any group of subjects may, at the discretion of the Faculty, be awarded in another group, whether a scholarship has been already assigned to that group or not.

Details of the requirements for these scholarships are given in a separate pamphlet, which can be obtained at the Registrar's Office.

Applications for these scholarships must be sent to the Registrar before July 1st.

MEDALS IN ARTS.

Gold Medals will be awarded in the Final Honours examination to the students who take the highest honours of the first rank in the subjects stated below, and who shall have passed creditably the ordinary examination for the degree of B.A. or B.Sc., provided they have been recommended therefor to the Corporation by the Faculty, on the report of the examiners:—

The Henry Chapman Gold Medal, for Classical Languages and Literature.

The Prince of Wales Gold Medal, for Mental and Moral Philosophy.

The Anne Molson Gold Medal, for Mathematics and Natural Philosophy.

The Shakespeare Gold Medal, for English Language and Literature.

The Logan Gold Medal, for Geology, Mineralogy and Palæontology.

The Major Hiram Mills Gold Medal, for Biology.

The Governor-General's Gold Medal, for Modern Languages and Literature.

The Allen Oliver Gold Medal, for Economics and Political Science (founded by Mrs. Frank Oliver, in memory of her late son, Allen Oliver, B.A., M.C., Lieutenant 26th Battery, C.F.A., who was killed in action at the Somme, on November 18th, 1916).

In addition to the above, certain medals are offered annually by the Alliance Francaise, at the discretion of the Department of Romance Languages.

If there be no candidate for any medal, or if none of the candidates fulfill the required conditions, the medal will be withheld, and the proceeds of its endowment for the year may be devoted to prizes in the subject for which it was intended.

PRIZES IN ARTS.

1. The Neil Stewart Hebrew Prize.—An annual prize of $15 is open to all undergraduates and graduates of this University, and also to graduates of any other university, who are students of theology in some college affiliated to this University. It will be awarded on the result of the sessional examination in Hebrew of the Second Year.

The prize, founded by the late Rev. C. C. Stewart, M.A., and terminated by his death, was re-established by the liberality of the late Neil Stewart, Esq., of Vankleek Hill.

2. Early English Text Society's Prize.—This prize, the annual gift of the Early English Text Society, will be awarded for proficiency in the subjects of the language group in the English honour curriculum of the Third and Fourth Years.

3. New Shakespeare Society's Prize.—This prize, the annual gift of the New Shakespeare Society, open to graduates and undergraduates, will be awarded for a critical knowledge of the following plays of Shakespeare:—Hamlet, Macbeth, Othello, King Lear.

4. Charles G. Coster Memorial Prize.—This prize, of the value of $25.00, and intended as a tribute to the memory of the late Rev. Chas. G. Coster, M.A., Ph.D., Principal of the Grammar School, St. John, N.B., is offered for competition by Mr. Colin H. Livingstone, B.A., to undergraduates (men and women) from the Maritime Provinces (Nova Scotia, New Brunswick and Prince Edward Island). It is awarded on the decision of the Dean of the Faculty of Arts to that student in Arts from the Maritime Provinces who shows the greatest proficiency in the examinations at the end of the session.

5. Annie Macintosh Prize.—The income of the sum of $1,130 ($425 of which was subscribed by the pupils and friends of the late Miss Annie Macintosh, and $618.97 bequeathed by the late Miss I. G. Macintosh), will be offered as a prize or prizes, to students of the Royal Victoria College in such subject, or for such work as the Faculty may determine.

6. Penhallow Prize.—The income of the sum of $1,100 collected by the Arts Undergraduates Society in 1911, will be assigned annually to the Department of Botany for a prize to be known as the "Penhallow" prize.

7. Henry Chapman Prize.—This prize, of the value of $15.00 is given in such modern languages as may be taught in the Faculty of Arts, other than English, and Hebrew shall also be included.

8. The Chester Macnaghten Prize of the value of $25.00 in books, established by Russell E. Macnaghten, Esq., M.A., in memory of his late uncle, will be awarded annually, through the University Literary and Debating Society, for reading in English.

SCHOLARSHIPS AND PRIZES IN APPLIED SCIENCE.

I. AWARDED ON THE RESULT OF SPECIAL EXAMINATIONS.

1. Two prizes, each of $10.00, presented by J. M. McCarthy, Esq., B.A.Sc., to students entering the Third Year, for proficiency in levelling and transit work.

2. Messrs. Babcock & Wilcox, Limited, offer every second year a scholarship of the value of $200.00 per annum, tenable for two years, to the best all-round man among the Engineering students who, having completed the work of the First and Second Years, is about to enter the Third Year, and who intends to make a special study of the subject of Steam Engineering. The conditions under which this scholarship is awarded may be ascertained on application to the Dean of the Faculty.

II. AWARDED ON RESULTS OF THE SESSIONAL EXAMINATIONS OR FOR SPECIAL THESES.

1. A British Association exhibition of $50.00 and a prize of $25.00 at the end of the Third Year, to the students who obtain the highest and the second highest aggregate marks, respectively, in the sessional examinations in Strength of Materials and Mechanics of the Third Year.

2. Three prizes of $25.00, $15.00 and $10.00, at the end of the Second Year, to the students obtaining the highest, and the second and third highest aggregate marks, respectively, in the sessional examinations in Analytic Geometry, Calculus and Mechanics of the Second Year.

3. A Scott exhibition of $50.00, founded by the Caledonian Society of Montreal, in commemoration of the centenary of Sir Walter Scott, and two prizes of $25.00 and $15.00, at the end of the First Year, to the students obtaining the highest, and the second and third highest aggregate marks, respectively, in the sessional examinations in Mathematics, Descriptive Geometry and Physics of the First Year.

4. Workshop Prize.—A prize of $20.00 presented by Mr. C. J. Fleet, B.A., B.C.L., for bench and lathe work in the wood-working department, open to students of not more than two terms' standing in workshop practice.

5. A prize of $50.00, presented by Mr. James Tighe, B.A.Sc., for research work in Hydraulics.

6. An exhibition offered to graduates by Mr. A. E. Childs, M.Sc., for a special research on "The flow of gas through pipes under pressure."

7. A prize of $25.00 presented by Messrs. Anglin Norcross, Ltd., to the student obtaining the highest marks in Architectural Drawing in the Second Year (No. 34) of the Department of Architecture.

8. A prize of $25.00 presented by Messrs. Anglin Norcross, Ltd., to the student obtaining the highest marks in the senior class in Architectural Engineering (No. 30 or No. 31) in the Department of Architecture.

9. The Louis Robertson Prize, founded by Mr. and Mrs. John A. Robertson, in memory of their son, John Louis Armour Robertson, who was killed in the Great War on July 18th, 1916. To be awarded to the undergraduate student who ranks highest in Design in the Final Year of the course in Architecture.

10. Prizes given by the Montreal Light, Heat & Power Consolidated for Fourth Year students in the Department of Electrical Engineering, amounting to $200.00.

11. The following prizes are offered for the best summer essays:—

To the students of the Civil Engineering course, a prize of $25.00, from a friend.

To the students of the Electrical Engineering course, a prize of $25,00, offered by the McGill Electrical Club, 1922-23.

To the students of the Metallurgical Engineering course, a prize of $25.00, presented by Milton L. Hersey, Esq., D.Sc.

To the students of the Mechanical Engineering course, a prize of $25.00, presented by the Crosby Steam Gauge & Valve Co.

To the students of the Mining Engineering course a prize of $25.00, presented by J. T. McCall, Esq.

12. There are offered each year by the Engineering Institute of Canada five student prizes of twenty-five dollars each, for the best paper in each of the branches of engineering—civil, mechanical, electrical, mining and chemical—received from a student member of the Institute. The successful papers become part of the literature of the Institute and place the authors in prominent touch with the engineering profession. Further particulars from Fraser S. Keith, Secretary, 176 Mansfield Street, Montreal.

13. Three prizes, one of $25.00 and the President's gold medal, one of $15.00 and one of $10.00, are offered annually for the best papers submitted to the Canadian Institute of Mining and Metallurgy by student members of the Institute.

14. The sum of $50.00 has been voted by the Undergraduates' Society of the Faculty of Applied Science, to be given as prizes for the best papers read before the Society during the session 1923-24.

15. One Sir William Dawson Exhibition, given by the New York Graduates' Society: value, $60.00.

16. Certificates of merit are given to such students as take the highest place in the sessional and degree examinations.

III. AWARDED AT THE DISCRETION OF THE FACULTY.

1. The Hon. Robert Jones' Scholarship, having a value of One Hundred and Twenty-five Dollars ($125.00) per annum, "is granted from time to time to some poor student for the full term of study in the Faculty of Applied Science."

Application for this scholarship should be made through the Dean of the Faculty of Applied Science. In awarding the scholarship the standing of the student in the matriculation examination will be considered, and the scholarship will not be continued if the standing of the student at any time during his course proves to be unsatisfactory.

2. The Baylis Scholarship, founded in memory of Mr. and Mrs. James Baylis, of Montreal, and having an annual value of $100.00, is awarded to some student who is in need of financial assistance to complete his course on entering the Second Year of the Faculty. The scholarship will be continued during the Third and Fourth Years, if the student's standing continues to be satisfactory.

Applications should be made through the Dean of the Faculty of Applied Science.

3. Two research and teaching fellowships, of the value of $750.00 each, have been established in the Mining Department—one endowed in memory of the late Sir William Dawson, one endowed by the late Dr. James Douglas, and a third, of slightly less value, is supported by graduates in Mining in the name of the late Dr. B. J. Harrington. All three fellowships are awarded annually if suitable candidates offer.

4. A research and teaching fellowship of the value of $80.00 per month during the University session is offered to students graduating in the Metallurgical Department. The student holding this fellowship is expected to spend two-thirds of his time in research and study for the M.Sc. degree, and one-third in teaching and other work for the Department.

5. The late Dr. James Douglas, who was a member of the Board of Governors, provided during his lifetime for twelve, or more, tutorial bursaries in the Faculty of Applied Science. In assigning these bursaries account will be taken of the circumstances of the applicants as well as of their academic standing.

These bursaries have a value of $100.00 per annum, and carry the obligation of giving tutorial instruction equivalent to one evening a week, to the satisfaction of the Faculty Committee. Students in the Third and Fourth Years of Applied Science are eligible.

MEDALS AND LOAN FUNDS IN APPLIED SCIENCE.

I. MEDALS.

1. A British Association medal is open for competition to students of the graduating class in each of the seven courses, and, if the examiners so recommend, will be awarded to the student taking the highest position in the final examinations. The British Association medals and exhibition were founded by the British Association for the Advancement of Science, in commemoration of the meeting held in Montreal in the year 1884.

2. A gold medal and three prizes, offered by the Canadian Institute of Mining and Metallurgy. For further particulars, see pages 202 and 263.

3. *Honours.*—On graduation, honours will be awarded for high standing in professional subjects.

2. LOAN FUNDS.

1. A fund has been established by the Applied Science Class of 1899, to be known as "The Class of 1899 Fund," for the purpose of aiding, each year, one or more students who, upon the completion of their Second Year work, require assistance to enable them to finish their course of study. The loans from this fund made to students will be repayable after graduation. Applications should be made through the Dean.

2. The George Henry Frost Fund was created by the gentleman whose name it bears for the purpose of aiding students who, when commencing the work of the Second or subsequent years, in the Faculty of Applied Science, require assistance to enable them to complete their course. Loans from this fund will bear interest at three per cent. and will be repayable within three years after graduation. In making loans from this fund the academic standing of the students will be taken into account.

MEDALS, PRIZES AND FELLOWSHIPS IN MEDICINE.

The Holmes Gold Medal, founded by the Medical Faculty in the year 1865, as a memorial of the late Andrew Holmes, Esq., M.D., LL.D., late Dean of the Faculty of Medicine, is awarded to the student of the graduating class who receives the highest aggregate number of marks in the different branches comprised in the medical curriculum.

The student who wins the Holmes Medal has the option of exchanging it for a bronze medal and the money equivalent of the gold medal.

The Sutherland Gold Medal, founded in 1878 by the late Mrs. Sutherland, in memory of her late husband, William Sutherland, M.D., formerly Professor of Chemistry in this Faculty, is awarded for the best examination in general and medical chemistry, together with a creditable examination in the primary branches. The examination is held at the end of the Third Year.

The Wood Gold Medal, founded by Casey A. Wood, M.D., awarded to the student of the graduating class who receives the highest aggregate number of marks in the clinical branches of the Final Year. The winner of the Holmes Medal and the winner of the Final Prize are not permitted to compete for this medal.

The Final Prize.—A prize in books, awarded for the best examination, written and oral, in the final branches. The Holmes medalist is not permitted to compete for this prize.

The Fourth Year Prize.—A prize in books, awarded for the best examination, written and oral, in all the branches of the Fourth Year course.

The Joseph Hils Prize. (Founded by the late Dr. Joseph Hils, of Woonsocket, R.I.)—A prize in books, awarded to the student who obtains the highest number of marks in the subject of Clinical Therapeutics.

The Third Year Prize.—A prize in books, awarded for the best examination, written and oral, in the branches of the Third Year.

The Joseph Morley Drake, M.D., Prize. (Founded by the late Joseph Morley Drake, M.D.)—A microscope, to be awarded to the student of the Fourth Year who obtains the highest number of marks for the examinations in Pathology and Bacteriology.

The Second Year Prize.—A prize in books for the best examination in all branches of the Second Year course.

The First Year Prize.—A prize in books for the best examination in all branches of the First Year course.

The A. A. Browne Memorial Fellowship.—The sum of $10,000 has been received by the Faculty from the committee of the A. A. Browne Memorial Fund. With this sum a fellowship has been established, to be known as the "A. A. Browne Memorial Fellowship." This fellowship is open to graduates of any recognized Medical School and is for the advancement of medical science, special preference being given to the subjects of obstetrics and gynæcology.

The James Douglas Research Fellowship.—The sum of $25,000 has been received from Dr. James Douglas, of New York, the proceeds to be devoted to co-ordinated research in the laboratories of pathology in or associated with the University.

The James Douglas Studentship.—A studentship in pathology, given by Dr. James Douglas, of New York, open to McGill graduates only, tenable for six years and of the value of $1,250 for the first year, increasing to $2,500.

The John McCrae Scholarship.—A scholarship of approximately $600, founded in 1918 as a yearly donation by Mr H. J. Fuller, of New York, in memory of the late Lt.-Col. John McCrae, for the purpose of scientific research in Experimental Surgery. Established in 1920 by Mr. Fuller and the Canadian Fairbanks-Morse Company as a permanent scholarship.

The Walter J. Hoare Memorial Scholarship.—A sum of money has been donated by Dr. Charles W. Hoare, a graduate of McGill University, as a Scholarship in the First Year Medicine, in memory of his son, Walter J. Hoare, who was killed in the Great War. This Scholarship is open to pupils of the Collegiate Institute, Windsor, Ontario, and is awarded each year for the best examination for matriculation into the Medical Faculty of McGill University.

The John W. Flinn Research Fellowship.—In 1921 Dr. John W. Flinn, of Prescott, Arizona, gave the sum of $5,000, to be paid in five equal annual instalments of $1,000, this sum to be used for the assistance of medical research in tuberculosis.

MEDALS, PRIZES AND SCHOLARSHIPS IN LAW.

The "Elizabeth Torrance Gold Medal", founded in 1864 by Professor John Torrance in memory of his wife, is awarded to the Civil Law student who obtains the highest marks in the Final Examination.

A special money prize may be awarded, at the discretion of the Governors, to the Common Law student who obtains the highest standing in the Final Year.

The Montreal Bar Association offers a prize of $50.00 to the student who obtains the highest standing in Commercial Law, and the Junior Bar Association a prize of $15.00 to the Civil Law student who obtains the best marks in Civil Procedure in the Final Year.

The "Alexander Morris Exhibition," of the value of $50.00, founded in memory of the late Hon. Alexander Morris, M.A., D.C.L., of Toronto, will be awarded to the student who obtains the highest standing in the Second Year.

Other prizes may be awarded at the discretion of the Governors.

The "Macdonald Travelling Scholarship" was founded by the will of the late Sir William Macdonald "for the purpose of enabling English-speaking Law students to take a course of studies in France," the testator "deeming it of great importance that the English-speaking members of the legal profession should be proficient in the French language." The value of the scholarship is the income derived from a capital sum of $20,000, and the scholar elected is required to pursue a year's study in the Law Faculty of the University of Dijon, France. The award is made at the discretion of the Faculty to a student of the graduating class who has obtained first or second class honours in the Final Examination.

Women students are not eligible for a Macdonald Scholarship so long as the law excludes them from admission to the Bar in the Province of Quebec.

The "Thomas Alexander Rowat Scholarship" was founded by Mr. Donald McKenzie Rowat, N.P., in memory of his brother, Lieutenant Thomas Alexander Rowat, B.C.L., who was killed in action at Lens, France, on the 28th June, 1917. It is of the value of $120, and is awarded in alternate years for proficiency in the French language and in the old French law. Candidates must be British subjects of Anglo-Saxon or Celtic origin. The next award of this scholarship will be in 1925.

Students in the Faculty are eligible for election to the Rhodes Scholarships tenable at the University of Oxford for a term of three years.

MEDALS AND PRIZES IN DENTISTRY.

The F. A. Stevenson Gold Medal.—Awarded to the student in the final year who stands first in the science and practice of Dentistry. The standing will be determined not only by the written and practical examinations at the end of the year, but by the general work of the student during the whole course.

Final Year Prize.—A prize in books will be awarded to the final year student who stands second in the class. The standing will be determined in a manner similar to that followed in the awarding of the gold medal.

Third Year Prizes.—Two prizes (first and second), in books, will be awarded to the Third Year students in the science and practice of Dentistry. The method of determining the winners of these prizes will be similar to that adopted in awarding the prizes in the final year.

Second and First Year Prizes.—A prize in books is awarded to the student obtaining the highest stand at the Final Examinations.

SCHOLARSHIPS—GENERAL.

THE RHODES SCHOLARSHIP.—This scholarship is of the annual value of £300 sterling and is tenable at the University of Oxford for three years. The scholar must be a British subject, must be over 19 and under 25 years of age, and must have reached at least the end of his Sophomore, or Second Year, in the University.

Full particulars can be obtained from Gilbert S. Stairs, B.A., K.C., of McGibbon, Mitchell, Casgrain & Stairs, 107 St. James St., Montreal, who is Secretary of the Selection Committee for the Province of Quebec.

SCIENCE SCHOLARSHIPS GRANTED BY HER MAJESTY'S COMMISSIONERS FOR THE EXHIBITION OF 1851.—These scholarships, of the value of £200 sterling a year, are tenable for two, or, in rare instances, three years. They are limited, according to the Report of the Commission, "to those branches of science, such as physics, mechanics and chemistry, the extension of which is especially important for our national industries." Their object is not to facilitate ordinary collegiate studies, "but to enable students to continue the prosecution of science with the view of aiding in its advance or in its application to the industries of the country."

They are open to students of not less than three years' standing who have shown evidence of capacity for original research, and are tenable at any university or other institution approved by the Commission.

Three of these Scholarships are allotted to Canada each year, the scholars being chosen by the Commission from the nominees of a certain number of Universities, among which McGill is included.

SCHOLARSHIPS AND FELLOWSHIPS FOR GRADUATES.

1. THE MCGILL DELTA UPSILON MEMORIAL SCHOLARSHIP.—This scholarship has been founded by the McGill Chapter of the Delta Upsilon Fraternity to perpetuate the memory of the members of that Chapter who gave their lives in the Great War.

It is open to all graduates of the University, and the following considerations will govern the award:—(a) The general scholarship of the candidate; (b) His need of financial assistance for further study; (c) The general usefulness to the community of the special branch of study he proposes to follow; (d) The likelihood that the candidate will reflect credit on the University.

The present value of the scholarship is about $750.

2. THE ALLEN OLIVER FELLOWSHIP (in Economics and Political Science).

This scholarship has been established by Mrs. Frank Oliver, of Edmonton, Alta., in "proud and loving memory of her son, the late Allen Oliver, B.A.,* M.C., Lieutenant 26th Battery, C.F.A., who was killed in action at

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*Lieut. Oliver was an Honour graduate of 1915 in the Department of Economics and Political Science.

the Somme on November 18th, 1916." The scholarship will be awarded annually to the student who stands highest in First Class Honours in the Department of Economics and Political Science at the final B.A. examination, and the holder is required to pursue his studies in Economics and Political Science in McGill University or elsewhere. The present value of the scholarship is about $650.

3. THE LEROY MEMORIAL FELLOWSHIP IN GEOLOGY.—This fellowship was established by some friends of Captain O. E. LeRoy (Arts, 1895), who was killed in the Battle of Passchendaele, in October, 1917. It will be annually awarded to a worthy student who desires to proceed to post-graduate studies in Geology at McGill University. The recipient of this award may be called upon to assist in the teaching work of the Department. This Fellowship is awarded by the Head of the Department of Geology and Mineralogy in consultation with the Principal. It is of the annual value of $700.

4. THE DR. T. STERRY HUNT RESEARCH SCHOLARSHIP IN CHEMISTRY. —It is proposed to offer this scholarship each year to graduate students in the Faculties of Arts and Applied Science.

5. POST GRADUATE SCHOLARSHIPS GRANTED BY THE IMPERIAL ORDER OF THE DAUGHTERS OF THE EMPIRE.—Nine are offered annually—one for each Province. They are of the value of $1,400.00, are tenable for one year and have been founded "to enable students to carry on studies at any university in the United Kingdom, in British and Imperial history, the economics and government of the Empire and Dominion, or any subject vital to the interests of the Empire."

Full details may be obtained from the Secretary of the National Chapter of Canada, 238 Bloor Street East, Toronto, Ont.

6. UNIVERSITY WOMEN'S FEDERATION SCHOLARSHIP.—The Scholarship of the Federation of University Women in Canada, of the value of $1000, available for study or research work, is open to any woman holding a degree from a Canadian University. In general, preference will be given to those candidates who have completed at least one or two years of graduate study and have a definite research in preparation. The award is based on evidence of character and ability of the candidate and promise of success in the subject to which she is devoting herself.

The choice of the University at which the successful candidate shall pursue her study or research work is left to the Committee of Selection in consultation with the candidate.

Full information can be obtained from the Convener of the Scholarship Committee, Mrs. Duncan B. Gillies, 41 Dinnick Crescent, Toronto.

Applications and recommendations must be received not later than February 1st. None can be accepted after that date.

7. MONTREAL MANUFACTURERS' GRADUATE FELLOWSHIP.—This fellowship has been established by the Montreal Branch of the Canadian

Manufacturers' Association with the sum of $3,375, from which shall be paid annually for four years, a graduate fellowship of $800 and in the fifth year of a sum equal in value to the amount remaining in the fund. It shall be awarded annually to a member of the graduating class in honours in Economics and Political Science to be selected by the Head of the Department. The student receiving the Fellowship shall pursue his graduate studies for the M.A. degree in the Department and shall take as the special subject of his investigation a subject dealing with Canadian trade or industry approved by the Head of the Department and by the Chairman of the Montreal Branch of the Canadian Manufacturers' Association.

8. THE AMI FELLOWSHIP IN GEOLOGY.—The Ami Fellowship in Geology for 1923, of the value of $300, will be awarded to some worthy student who graduates in 1923.

9. THE SIR WILLIAM MACDONALD SCHOLARSHIP IN LAW.—A travelling scholarship has been established by the will of the late Sir William Macdonald, "for the purpose of enabling English-speaking Law students to take a course of studies in France," the donor "deeming it of great importance that the English-speaking members of the legal profession should be proficient in the French language."

The value of this scholarship is the income derived from the sum of $20,000.

10. THE A. A. BROWNE MEMORIAL FELLOWSHIP.—From the proceeds of the sum of $10,000, which was received by the Faculty from the committee of the A. A. Browne Memorial Fund, a fellowship has been established, known as the "A. A. Browne Memorial Fellowship." This fellowship is open to graduates of any recognized Medical School and is for the advancement of medical science, special preference being given to the subjects of obstetrics and gynæcology.

11. THE JAMES DOUGLAS RESEARCH FELLOWSHIP.—This fellowship, founded by the late Dr. James Douglas, with an endowment of $25,000, is awarded to promote co-ordinated research in the laboratories of pathology in or associated with the University.

FEES.

GENERAL REGULATIONS.

1. Fees are due and payable to the Bursar as follows:—

Students in	Law	Sept. 20th
" "	Medicine	" 26th and 27th
" "	Dentistry and Pharmacy	" 28th
" "	Arts (men and women), Commerce excepted	Oct. 3rd and 4th
" "	Commerce	" 5th
" "	Applied Science	" 8th and 9th
" "	School for Graduate Nurses, Social Service and the School of Physical Education	" 10th

Students who pay by instalments will be required to pay the second instalment on or before February 1st.

The registration ticket must be shown to the Bursar at the time of the first payment.

Fees from students in all Faculties will also be accepted before Oct. 1st.

After Oct. 10th or Feb. 1st (in the case of those who pay by instalments) an additional fee of $2.00 will be exacted of all students in default.

2. Immediately after October 20th, or February 5th (in the case of students who pay by instalments), the Bursar will send to the Deans of the several Faculties a list of the registered students who have not paid their fees, on receipt of which the Dean shall cause their names to be struck from the registers of attendance, and such students cannot be readmitted to any class except on presentation of a special ticket, signed by the Bursar, certifying to the payment of fees.

3. Students registering after October 10th shall pay their fees at the time of registration, failing which they become subject to the provisions of regulation 2.

4. No fees will be refunded to partial students under any circumstances whatever.

MATRICULATION EXAMINATION FEES.

See pages 52 and 72

FEES IN ARTS.

Sessional fee for the undergraduate course in Arts..... (This includes fee for library, gymnasium and graduation.)	$100.00
By instalments:—	
First instalment, if paid before October 10th.....	$51.00
Second instalment, if paid before February 1st.....	51.00
Sessional fee for the undergraduate course in the School of Commerce.....	$150.00
By instalments:—	
First instalment, if paid before October 10th.....	$77.00
Second instalment, if paid before February 1st.....	77.00

Students entering Second Year Commerce from the Faculty of Arts must pay in this year a fee of $200, $50 being for the difference in fee between Arts and Commerce in the First Year.

At the request of the students themselves and by the authority of Corporation, an additional fee of $12.00 will be exacted from all men undergraduates and conditioned undergraduates, for the support of the Literary and Debating Society, the Arts Undergraduates' Society, the Commercial Society, the Canadian Club, the Union, the McGill Daily and athletics. Women students pay an additional fee of $3.00 for athletics and athletic grounds, and $2.50 for the Royal Victoria College Undergraduates' Society.

Fees for Laboratory Courses.

Fees for supplies, as detailed below, will include all laboratory materials, reagents, and the use of instruments, and will cover ordinary wear and tear of instruments and apparatus, but they will not cover losses through waste, neglect, or breakage. The charges under this head will be deducted from the students' caution money at the end of the session.

General Chemistry (1).....	$ 7.50
Organic Chemistry (2).....	5.00
Analytical Chemistry.....	12.50
Organic Chemistry, advanced (5).....	15.00
Quantitative Analysis, advanced (8).....	10.00
Biological Chemistry (10).....	10.00
Biological Chemistry, advanced (11).....	5.00
Food Chemistry Laboratory.....	10.00
Physics (per session).....	7.50
Botany (for sessional courses).....	10.00
Botany (for term courses).....	5.00
Zoology (for sessional courses).....	10.00
Zoology (for term courses).....	5.00
Psychology	2.50

Fees for Limited Undergraduates in the Faculty of Arts.

In the First Year the fees shall be $17.00 per course; in the Second Year $20.00 per course; in the Third and Fourth Years $25.00 per course.

Fees for Limited Undergraduates in the School of Commerce.

In the First Year the fees shall be $25.00 per course; in the Second, Third and Fourth Years $30.00 per course.

Any Arts student transferring to Second Year Commerce must pay a fee of $200.00 for that Year.

Fees for Partial Students in Arts.

The fees for partial students are: $4.00 for library, $3.00 for athletics and athletic grounds, and a fee at the rate of $7.00 for an hour a week of instruction during the academic year, but the maximum fee shall in no case exceed the full undergraduate fee.

Fees for Partial Students in Commerce: $4.00 for library, $3.00 for athletics and athletic grounds and a fee at the rate of $9.00 for an hour a week of instruction during the academic year, but the maximum fee shall in no case exceed the full undergraduate fee.

Graduates in Arts of this University are allowed, on payment of one-half of the usual fees, to attend all lectures in the undergraduate course, except those for which a special fee is exigible. Graduates of other universities attending full courses in affiliated theological colleges are given the like privilege.

Special Fees.

Supplemental examination, taken at the regular date fixed by the Faculty	$ 5.00
Each subsequent supplemental examination in the same subject	10.00
Supplemental examination, when granted at any other time than the regular date fixed by the Faculty, for each examination period	10.00

All fees for supplemental examinations must be paid to the Bursar and the receipts shown to the Dean before the examination.

Fee for the degree of B.A. or B.Sc. (Arts) conferred in absentia (except when the candidate has been specially exempted by the Faculty)	$20.00

Caution Money.—Every student is required to deposit with the Bursar the sum of $10.00 as caution money, to cover damages done to furniture, apparatus, books, etc. This amount, less deductions (if any), will be returned at the close of the session.

For fees for Double Course students in Arts and Medicine, see page 105.

FEES IN APPLIED SCIENCE.

Sessional fee for the undergraduate course..... ..... $205.00

By instalments:—

First instalment, if paid before October 10th..... $105.00
Second instalment, if paid before February 1st..... 105.00

Fees are payable on October 8th and 9th, but they will also be received before October 1st.

After October 10th or February 1st (as the case may be) an additional fee of $2.00 will be exacted of all students in default.

Students taking the summer schools in May and September are required to pay the sum of $35.00 (including Caution Money Deposit), which will be placed to their credit on the fee for the following session.

At the request of the students themselves, and by authority of Corporation, an additional fee of $12.00 will be exacted from all undergraduates and conditioned undergraduates for the support of the Literary Society, the Undergraduates' Society, the Canadian Club, the Union, the McGill Daily and athletics.

Graduates of this Faculty taking an additional undergraduate course will pay one-half of the undergraduate fee.

Students taking the six-year double course in Arts and Applied Science shall pay full fees in Arts for the first three years of their course and full fees in Applied Science for the remaining three years, and an extra fee for the work required to be done in Applied Science whilst they are taking their course in Arts, to be computed at the rate charged partial students as stated below.

The fees for partial students are:—$4.00 for library, $3.00 for athletics and athletic grounds, $1.00 for the Undergraduates' Society, and a fee at the rate of $7.00 for an hour a week of instruction during the academic year, but the maximum fee shall in no case exceed the full undergraduate fee.

Caution Money.—Every student is required to deposit with the Bursar the sum of $10.00, as caution money, to cover damage done to furniture, apparatus, books, etc. This amount, less deductions (if any), will be returned at the close of the session.

Fee for the degree of B.Sc., conferred in absentia (except when the candidate has been specially exempted by the Faculty).. $ 20.00

For a regular supplemental examination, the fee is $5.00, for each subsequent supplemental examination in the same subject $10.00, for a special supplemental examination $10.00.

FEES IN MEDICINE.

All students must register with the University Registrar before paying their fees.

The total Faculty fees for the medical course of six full sessions, including clinics, laboratory work, dissecting materials and reagents will be *twelve hundred dollars*, payable in six annual instalments of $200.00 each.

Double Course students in Arts and Medicine qualifying for the Degrees B.A. or B.Sc. and M.D. shall pay full fees in Arts for two years and in Medicine for six. They shall also pay $30.00 as a graduation fee in the Faculty of Arts as well as in Medicine.

At the request of the students themselves and by the authority of Corporation, an additional fee of $12.00 will be exacted from all men undergraduates, for the support of the Literary Society, the Undergraduates' Society, the Canadian Club, the Union, the McGill Daily, and athletics.

The sum of $10.00 is collected from all students at the time of registration as "caution money," from which deductions for breakage reported from the laboratories or lecture rooms are made and a refund granted at the close of the session.

Partial students will be admitted to one or more courses on payment of special fees. No fees will be refunded to partial students under any circumstances whatever.

Students repeating the course of study of any academic session are not required to pay full fees. A fee of one hundred dollars will be charged, which will include dissecting material, chemical reagents, laboratory fees, etc. The same fee is charged students entering from other colleges who have already paid full fees elsewhere for the course taken. These students are also required to pay in addition the hospital fees exacted in the year to which they are admitted.

Students taking out extra dissecting material will be charged at the rate of $10.00 for a half session, and $20.00 for a whole session.

An *ad eundem* fee of $10.00 is charged students entering from another university in any year above the first.

The fee for the Degree of Doctor of Medicine and Master of Surgery is $30.00, to be paid by the successful candidate to the University Bursar immediately after the final examination. When the degree is conferred in absentia, an additional fee of twenty dollars will be exacted unless the candidate has been specially exempted by the Faculty.

The fee for the course in Public Health, including laboratory fee, the fee for outdoor work and the diploma fee, is $100.00.

SUMMARY OF FEES.

Sessional fee		$200.00
By Instalments:		
First instalment, if paid before Sept. 28th	$102.00	
Second instalment, if paid before February 1st	102.00	
Microscope, first instalment (on deferred payment plan)	35.00	35.00
Caution money (deposit)	10.00	10.00
Fee for Union, athletics, etc	12.00	12.00
	$261.00	$257.00
Graduation fee		$ 30.00

MICROSCOPES.

Each student is required to provide himself, on beginning his studies, with a first-class microscope for laboratory and private study throughout his course. The Faculty will supply the instruments necessary for demonstrations, etc. The microscope must be of substantial construction and be provided, as a minimum, with the following accessories:—$\frac{2}{3}$, $\frac{1}{6}$ and $\frac{1}{12}$ oil immersion objectives, and a substage condenser. Such an instrument will last a lifetime and is an essential part of the equipment of a practitioner in medicine.

Should the student not be provided with such a microscope, he may purchase a new guaranteed instrument through the Bursar's office of the University for the sum of $120.00 or on the deferred payment plan by which payment is spread over five years as follows:—First Year, $35.00; second year, $27.50; third year, $25.00; fourth year, $22.50; fifth year $15.00.

FEES IN DENTISTRY.

Fees shall be paid to the Bursar on September 28th, or at any time before September 24th. The registration ticket must be shown to the Bursar, in every case, before the fee is paid. After October 10th, an additional fee of $2.00 will be exacted of all students in default.

Immediately after October 20th, the Bursar shall send to each of the Deans of the several faculties a list of the registered students who have not paid their fees, on receipt of which the Deans shall cause their names to be struck from the register of attendance, and such students cannot be readmitted to their classes except on presentation of a special ticket, signed by the Bursar, certifying to the payment of fees.

Students registering after October 10th shall pay their fees at the time of registration, failing which, they become subject to the provisions of the above regulation.

At the request of the students themselves, and by authority of Corporation, an additional fee of $12.00 is exacted from all men undergraduates and conditioned undergraduates for the support of the Literary Society, the Undergraduates' Society, the Canadian Club, the McGill Daily, the Union and athletics.

The sum of $10.00 is collected from all students at the time of registration as "Caution Money," from which deductions for breakages reported from the laboratories or lecture rooms are made. The balance will be refunded at the close of the session.

Partial students will be admitted to one or more courses on payment of special fees. No fees will be refunded to partial students under any circumstances whatever.

Students repeating the course of study of any academic session are not required to pay full fees. A fee of one-half the regular fee will be charged, which will include dissecting material, chemical reagents, laboratory fees, etc. The same fee is charged students entering from other colleges who have already paid full fees elsewhere for the courses taken. Students repeating the Third or Fourth Year will be required to pay in addition a Hospital Fee of $25.00.

An "*ad eundem*" fee of $10.00 will be charged students entering from another university in the Second, Third or Fourth Year of the course.

SUMMARY OF FEES.

Sessional fee		$200.00
By instalments:—		
First instalment, if paid by 10th October	$102.00	
Second instalment, if paid by 1st February	102.00	
Athletics and Societies		12.00
Rent of Microscope: $3.00, 1st year; $4.00, 2nd year; $3.00, 3rd year;		
Caution Money (deposit)		10.00
		$222.00

In the Fourth Year there will be an extra fee of $30.00 for the Degree. When the Degree is conferred in absentia an additional fee of $20.00 will be exacted unless the candidate has been specially exempted by the Faculty.

The cost of instruments and material for First Year students is at least $40.00 and for Second Year students $350.00. These instruments are practically all that will be needed in an ordinary dental practice.

FEES IN PHARMACY.

All students must register with the University Registrar before paying their fees.

For the session 1923-24 the fees for separate courses will be as follows:—

Registration fee	$ 5.00
Fee for Athletics and Athletic Grounds	3.00
Course in Junior Chemistry and Physics	50.00
Course in Senior Chemistry	50.00
Course in Junior Materia Medica and Pharmacy	50.00
Course in Senior Materia Medica and Pharmacy	50.00
Course in Practical Pharmacy	50.00
Course in Analytical Chemistry	50.00
Course in Botany	25.00
Diploma Fee	15.00
Fee for Supplemental Examination, each subject	5.00

Certain fees are payable to the Pharmaceutical Association of the Province of Quebec for registration, examinations, and for the licentiate in pharmacy. (See page 330.)

Fees shall be paid to the Bursar on or before October 10th. After October 10th an additional fee of $2.00 will be exacted of all students in default.

Immediately after October 20th the Bursar shall send to the Head of the Department a list of the registered students who have not paid their fees, on receipt of which their names shall be struck from the register of attendance, and such students cannot be re-admitted to their classes except on presentation of a special ticket, signed by the Bursar, certifying to the payment of fees.

Students registering after October 20th shall pay their fees at the time of registration, failing which they shall be obliged to pay the additional fee of $2.00 which is exacted of students in default.

At the request of the students themselves and by the authority of Corporation, an additional fee of $12.00 is exacted from all men undergraduates and conditioned undergraduates, for the support of the Literary Society, the Undergraduates' Society, the Canadian Club, the Union, the McGill Daily, and athletics. For students of Pharmacy, this fee is optional, but they are required to pay the athletics fee of $3.00.

The sum of $5.00 is collected from all students at the time of registration as "caution money," to cover breakages in the laboratories or lecture rooms. The balance will be refunded at the end of the session.

The University supplies all reagents and apparatus in the various laboratories. Charge is made for breakages only.

Partial students will be admitted to one or more courses on payment of special fees. *No fees will be refunded to partial students under any circumstances whatever.*

FEES IN LAW

The sessional fee of $150.00 is payable to the Bursar not later than the 3rd of October. Students who prefer to do so may pay the fee in two instalments of $77.00, the second of which is due not later than the 1st of February.

Students who make default in payment are liable to be removed from the Faculty in accordance with the regulations of the University.

Men students pay an additional fee of $12.00 for the support of various undergraduate activities and for athletics. This fee has been sanctioned at the request of the student body.

The regular graduation fee is $12.50. Where the degree is conferred *in absentia* an additional fee of $20.00 will be exacted, unless the student has been specially exempted by the Faculty.

Partial students will pay fees calculated at the rate of $7.00 per point for the courses which they attend and a fee of $3.00 for athletics and the use of athletic grounds.

Every student is required to deposit with the Bursar the sum of $5.00 as caution money to cover damage done to University property. The balance, less any deductions, will be returned at the close of the session.

FEES IN THE FACULTY OF GRADUATE STUDIES

For the course leading to the degrees of M.A., LL.M., M.Sc. or M.S.A.	$40.00
For each year of the course leading to the degree of Ph.D.	40.00
Graduation fee for M.A., LL.M., M.Sc., or M.S.A.	20.00
Graduation fee for M.A., LL.M., M.Sc., or M.S.A. (in absentia)	40.00
Graduation fee for Ph.D.	30.00
Graduation fee for the degree of D.Litt.	80.00

Graduation fee for the degree of D.C.L. ..... $ 80.00
Graduation fee for the degree of D.Sc. 80.00
Graduation fee for the degree of Mus. Doc. 100.00

There is no fee for the degrees of LL.D. or M.A. when granted *honoris causa*.

The graduation fee (which covers the charges for examination) is payable when the candidate presents himself for examination and is not returnable if he is unsuccessful. **No thesis can be accepted unless it is accompanied by a receipt from the Bursar for this fee.** If, however, a candidate for the degree of M.A., LL.M., M.Sc., or M.S.A. fails, he may present himself for the examination in a subsequent year without further payment of fees. A candidate for the degree of Ph.D., D.Sc. or D.Litt., in case of failure, may present himself once again, in a subsequent year, upon payment of an additional sum amounting to one half of the usual fee for this degree.

Lecturers, tutors and demonstrators in the University who are proceeding to the degree of Master of Arts, Master of Science, Master of Science in Agriculture or Doctor of Philosophy, shall, so long as they remain members of the teaching staff, be exempt from the tuition fee, but will be required to pay laboratory and registration fees and the fee for graduation in every case. In the event of their leaving the staff after one year of the course, they are required to pay a tuition fee of $20.00 in the M.A., M.Sc. or M.S.A. course and the prescribed fee in the Ph.D. course.

The fee for the degree of Mus. Doc. is payable in two instalments. Fifty dollars must be paid when the candidate submits his exercise. If the exercise is not approved, he may in a subsequent year submit another exercise upon payment of $25.00 The second instalment of $50.00 must be paid before the subsequent examination. If the candidate be unsuccessful, he may in a subsequent year present himself again for examination upon payment of $25.00.

Candidates must pay their fees at the office of the Bursar when their courses have been approved, and after they have registered with the Registrar.

FEES IN MUSIC.

CONSERVATORIUM FEES.

The fees will be as follows:—

Regular Students. $175 a year payable at the beginning of the session (not later than October 1st), or in two instalments of $90 each, payable before October 1st and Feb. 1st, respectively. This sum will also cover the fees for Diploma or Degree Examination at the end of the year.

Senior Partial Students. $40 per term of eleven weeks. Students paying in full for the three terms of eleven weeks each, will be allowed to take the examination for a Certificate at the end of the year without any further fee.

Junior Partial Students. $33 per term of eleven weeks. Students paying in full for three terms of eleven weeks each, will be allowed to take the examination for a Certificate at the end of the year without any further fee. No one over the age of 16 years can enroll as a Junior partial student.

Repertoire Students. $60 per term of eleven weeks.

Occasional Students. Fees vary between $15 and $5 per term, according to class. Precise information can be obtained on this point from the Secretary.

The Fees for examinations for Certificates, when not included in the term fees as above mentioned, will be the same as the fees for the Local Examinations. (See page 395.)

In all cases fees must be paid strictly in advance at the office of the Conservatorium.

No individual or class lessons will be given to any student who is unable to produce a card, showing that the necessary fees have been paid.

FEES FOR DIPLOMA AND DEGREE EXAMINATIONS.

Diploma of Licentiate (L. Mus.)—Fees for examinations, $45, of which $15 is payable at each examination. Diploma fee, $5.

Degree of Bachelor of Music—Matriculation fee, $7 (see University Calendar). Fees for examinations payable as follows:—First examination in Music, $20. Second examination in Music, $20. Final examination in Music, $20. Graduating fee, $20.

Although under special conditions exemptions from certain examinations for the Diploma of Licentiate and Degree of Bachelor of Music may be allowed, there will be no exemption from the fees given above, except in the case of candidates holding McGill Local Centre Certificates.

Degree of Doctor of Music—Fee $100, one-half of which ($50) is to be paid when submitting exercise and the balance ($50) before the final examination.

N.B.—Candidates examined in theoretical subjects connected with the above Degrees and Diplomas at centres other than Montreal will probably have to pay a local supervisor's fee in addition to the fees stated above.

FEES IN THE SCHOOL FOR SOCIAL WORKERS

For Diploma and Certificate Students.—The annual fee is $70.00; if paid in two instalments (in October and February) $72.00 (this includes the library fee). The grounds fee, payable by students to the University, is $3.00; this fee permits students to take part in athletics, etc. Students are required to deposit with the Bursar the sum of $5.00 as caution money, to cover damages done to furniture, apparatus, books, etc. This amount, less deductions (if any), will be returned at the close of the Session. Books and other School expenses should not exceed $15.00.

Partial Students.—Partial students will be charged a fee at the rate of $7.00 for an hour a week of instruction during the academic year, but the maximum fee shall in no case exceed the full Diploma or Certificate fee. Partial students taking three hours or more a week will be required to pay the library fee ($4.00), the grounds fee ($3.00), and deposit $5.00 with the Bursar as caution money.

Extension Course Students and Partial Students taking less than three hours a week of Instruction.—These students desiring to use the University Library will be required to deposit $5.00 with the Librarian to cover damage done to books. This amount, less deductions (if any), will be returned at the close of the Session. A nominal fee, to be arranged by the Committee, will be charged for Extension Lectures.

FEES AND DEPOSITS IN THE SCHOOL FOR GRADUATE NURSES

The fee for any certificate course is $100.00 a year (including the use of the Library), to be paid by October 10th, or payable in two instalments of $51.00 each, to be paid by October 10th and February 1st.

Partial Students:—Fee at the rate of $7.00 for an hour of instruction a week during the academic year; library fee of $4.00; special fee for courses which include Laboratory work.

Regular students, as in all departments of the University, pay in addition a $3.00 athletics fee.

A deposit of $5.00 caution money is required from all regular students.

EXPENSES.

A statement of average expenses for the academic year is as follows:—

University fees	$103.00
Books	20.00 to $ 40.00
Room (30-32 weeks)	175.00 " 225.00
Board	225.00 " 300.00
Incidentals	30.00 " 40.00
Average total	550.00 to 700.00

FEES IN THE SCHOOL OF PHYSICAL EDUCATION.

Sessional fee for Education Course	$150.00
By instalments:	
First instalment, if paid before or on October 11th	77.00
Second instalment, if paid before or on February 1st	77.00

NOTE.—The deposit fee of $10.00 made at the time of acceptance of application will be credited toward the Sessional fee.

In addition there will be a fee of $3.00 for athletics and athletic grounds.

Fees for Partial Students: $4.00 for library, $3.00 for athletics and athletic grounds and a fee at the rate of $9.00 for an hour a week of instruction during the academic year, but the minimum fee shall in no case exceed the full undergraduate fee.

No fees will be refunded to partial students under any circumstances whatever.

Supplemental examination in any subject	$ 5.00
Special supplemental examination in any subject	10.00

Caution Money.—Every student is required to deposit with the Bursar the sum of $5.00 as caution money, to cover damages done to furniture, apparatus, books, etc. This amount, less deductions (if any), will be returned at the close of the session.

LIBRARY FEES.

The Library fee for undergraduate students in the Faculties of Arts, Applied Science and Law is included in the University fees. The fee for partial students is $4.00. Graduates, extension course students, and medical students using the University Library must make a deposit of $5.00 at the Bursar's Office. The fees for members of the McGill College Book Club and the University Book Club are payable to their respective treasurers. Individuals not belonging to any of the above groups may use the Reading Room without charge, but should apply to the Library Committee, through the Librarian, for permission to take books from the building.

MISCELLANEOUS FEES.

Fee for supplemental course in Physical Education in September	$10.00
Certificate of standing (general)	1.00
Certificate of standing, accompanied by a statement of classification in the several subjects of examination	2.00

All applications for certificates must be addressed to the Registrar of the University, accompanied by the required fee.

No certificates are given for attendance on lectures unless the corresponding examinations have been passed.

MORALS AND DISCIPLINE.

1. University discipline shall be exercised by the several Faculties, and by the Committee on Morals and Discipline, subject in the cases hereinafter mentioned to revision or confirmation by Corporation.

2. Subject to the provisions of the following sections, each Faculty shall be entitled to exercise University discipline over its own students.

3. All cases of discipline involving the interests of more than one Faculty, or of the University in general, shall be dealt with by a standing Committee of Corporation, to be known as the Committee on Morals and Discipline. The Committee shall have power to summon as assessors the President and Vice-President of the Students' Council.

4. All such cases of discipline as are referred to in sub-section 3 shall be reported to the Principal, or, in his absence, to the Vice-Principal, or, in the absence of both, to the senior Dean present in the city. If the Principal, or, as the case may be, the Vice-Principal or the Dean, deems action necessary, the matter shall be reported to the Committee on Morals and Discipline. Corporation shall also have the power to report such matters to the said Committee.

5. When sentence of expulsion, or of suspension for more than three months, has been pronounced or recommended by a faculty, or by the Committee on Morals and Discipline, the Corporation may entertain an appeal, which shall be final.

6. "University discipline" shall mean any appropriate method of exercising authority over students, and shall, but without prejudice to the foregoing generality, include the power of expulsion, suspension, disqualifying from competing for scholarships, exhibitions, medals, prizes or honours, imposing fines, not exceeding $25.00, on any student, levying assessments for damage done, reporting to parents or guardians and admonition.

7. Any student found guilty of immoral, dishonest, disorderly or improper conduct, or of wrongfully causing damage to person or property, shall be liable to University discipline.

The following resolution should be noted here: "The Corporation of the University viewing with marked disfavour the organized kidnapping or other proceedings of a violent and objectionable character practised by the students of the First and Second Years at the beginning of the Session, hereby requires the student body to discontinue such practices under severe penalties."

8. If on an occasion of general disorder on the part of a year, class, or group of students, damage be done to University property, or acts committed meriting discipline, and the individuals who have done such damage or committed such acts have not been discovered, an assessment to cover the damage may be laid, or a fine imposed, or both, on all the members of such year, class or group.

9. While in College, or in the College grounds, students shall conduct themselves in the same orderly manner as in the class-rooms. Smoking is prohibited in the College buildings, except in such rooms, if any, as may be set apart for that purpose. Any professor observing improper conduct on the part of a student in the College buildings or grounds may admonish him, and, if necessary, report him to the Dean of the Faculty in which he is enrolled. Without, as well as within, the walls of the College, every student is required to maintain a good moral character.

COLLEGE GROUNDS AND ATHLETICS.

1. The management of the College grounds and of out-door athletics and sports is under the control of the Committee on Physical Education. This Committee is responsible for the general maintenance of all University grounds, and retains the ultimate authority and power of supervision in all matters affecting athletics in the University. All matters which may in any way affect athletics must be referred to this Committee, and its approval must be obtained before any departure is made from the authorized routine.

All students entering the University for the first time and all others desirous of taking part in football matches, or otherwise engaging in violent athletic contests, must pass a medical examination to be held under the direction of the Director of Physical Education during the month of October. A complete record of all such examinations shall be kept by the Director or some other officer appointed to this duty. The managers and captains of clubs, or other responsible executive officers, are required to insist upon the strict observance of the rule in regard to medical examination and all the rules and regulations of the Committee which concern them.

All clubs must submit their regulations, rules, and by-laws, and any changes in the same, for the approval of the Committee. They must make application for the use of such portions of the grounds as they require, and for any special privileges.

Clubs must not engage in matches with outside clubs, except with the approval of the Committee.

During the session, and including the Christmas holidays, all teams and individual students desiring to participate in outside athletics* must first obtain a sanction from the Athletic Association, such sanction to be approved by the Committee on Physical Education.

Students who participate in outside athletics without having received such sanction may be suspended from the University by the Committee on Physical Education, if the consent of the Principal has been given, until Corporation shall meet to deal with the matter.

The Athletic Association must submit its programme for each year for the approval of the Committee.

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*Outside athletics is interpreted to mean those athletics over which the Athletic Association of the University or the Canadian Intercollegiate Athletic Union does not have control.

All students in good standing who are taking a course of study held to be sufficient by a special committee of the Faculty in which they are enrolled will be allowed to take part in athletics, subject, however, to the general regulation regarding medical examination.

Suspension from lectures for any cause, or absence from more than one-eighth of the total number of lectures given in any course, as shown by the monthly reports furnished to the Dean of each Faculty by the several professors and lecturers, shall be considered as sufficient ground to disqualify a student from engaging in athletic contests.

All students of the University are required to pay a fee of three dollars ($3.00) for the use of the grounds (this is included in the general fee of $12.00 paid by undergraduates). The amount so paid is handed over to the Students' Council, and is by this body expended in the interest of College athletics, under the general direction of the Committee on Physical Education.

The amount derived as grounds and athletics fees from the students of the Royal Victoria College is placed at the disposal of the Committee in charge of the grounds, for expenditure in the interests of women-students.

The annual sports of the University are held on the third Friday of October in each year. The day is observed as a holiday.

Such persons as are entitled to use the grounds shall be provided with tickets, renewable each year. Those entitled to tickets are the members of the University and prominent benefactors, and the families of Governors and Professors.

UNIVERSITY ATHLETIC ASSOCIATION.

All matters connected with athletics at the University are under the immediate supervision of the University Athletic Association, which in turn is responsible to the Committee on Physical Education. The Executive of the Athletic Association consists of the presidents of the various clubs of the Association, thirteen in number.

The Track Club is entrusted with the regulation and encouragement of track and field athletics; the management of the Inter-class sports and of the annual University sports.

The Rugby Football Club is represented by a senior and intermediate team in the Intercollegiate Union, and a junior team in the Q.R.F.U. In addition to these championship matches, a series of inter-faculty or inter-class matches is played annually for the "Wood Cup."

The Hockey and Skating Club is represented by a Senior Team in the Intercollegiate League and by Intermediate and Junior Teams in the City League. A series of inter-class games is played annually for the "Capper-Porter Trophy." In addition an all-star inter-faculty series is played.

The Basketball Club is represented by the Senior Teams in the Intercollegiate and City Leagues and by Intermediate and Junior teams in the City League. A series of inter-class games is played annually.

The Boxing, Wrestling and Fencing Club, in addition to holding an annual "Assault at Arms," is represented in Intercollegiate competition.

The remaining clubs, most of which are represented in Intercollegiate Unions, are: Harriers, Association Football, English Rugby, Ski-ing and Snowshoeing, Gymnastics, Tennis, Swimming, Water Polo and Indoor Baseball.

PHYSICAL EDUCATION.

For particulars, see page 441.

ACADEMIC DRESS.

Professors, lecturers and students are required to wear academic dress at lectures, except in those cases in which a dispensation shall have been granted by the Faculty.

Undergraduates shall wear a plain black stuff gown, not falling below the knee, with round sleeve cut above elbow.

Bachelor of Arts.—Black stuff gown, falling below knee, with full sleeve cut to elbow and terminating in a point (similar to that of the Cambridge B.A.); hood, black silk, lined with pale blue silk and edged with white fur.

Bachelor of Science.—The same gown as Bachelors of Arts; hood, black silk, lined with yellow silk and edged with white fur.

Bachelor of Science in Agriculture.—The same gown as Bachelors of Arts; hood, black silk, lined with dark green silk and edged with white fur.

Bachelor of Civil Law.—The same gown as Bachelors of Arts; hood, black silk, lined with French grey silk and edged with white fur.

Bachelor of Laws.—The same gown as Bachelors of Arts; hood, black silk, lined with scarlet silk and edged with white fur.

Bachelor of Architecture.—The same gown as Bachelors of Arts; hood, black silk, lined with white silk and edged with white fur.

Bachelor of Music.—The same gown as Bachelors of Arts; hood, black silk, lined with pale mauve silk and edged with white fur.

Bachelor of Commerce.—The same gown as Bachelors of Arts; hood, black silk, lined with purple silk and edged with white fur.

Master of Arts.—Black gown of stuff or silk, falling below knee, with long sleeve with semi-circular cut at the bottom (similar to that of the Cambridge M.A.); hood, black silk, lined with pale blue silk.

Master of Science.—The same gown as Masters of Arts; hood, black silk, lined with yellow silk.

Master of Laws.—The same gown as Masters of Arts; hood, black silk, lined with scarlet silk.

Doctor of Medicine.—The same gown as Masters of Arts; hood, scarlet cloth, lined with dark blue silk.

Doctor of Dental Surgery.—The same gown as Masters of Arts; hood, scarlet cloth, lined with pink silk.

Doctor of Laws.—The same gown as Masters of Arts; hood, scarlet cloth, lined with white silk.

Doctor of Literature.—The same gown as Masters of Arts; hood, scarlet cloth, lined with pale blue silk.

Doctor of Science.—The same gown as Masters of Arts; hood, scarlet cloth, lined with yellow silk.

Doctor of Civil Law.—The same gown as Masters of Arts; hood, scarlet cloth, lined with French grey silk.

Doctor of Music.—The same gown as Masters of Arts; hood, scarlet cloth, lined with pale mauve silk.

Doctor of Philosophy.—The same gown as Masters of Arts; hood, scarlet cloth, lined with pale green silk.

Doctors of Laws, Doctors of Civil Law, Doctors of Literature, Doctors of Science, Doctors of Philosophy and Doctors of Music shall be entitled to wear for full dress a robe of scarlet cloth (similar in pattern to that of the Cambridge LL.D.), faced with silk of the same colour as the lining of their respective hoods.

All hoods shall be in pattern similar to that of the Masters of Arts of Cambridge University.

Undergraduates and graduates shall wear the ordinary black trencher with black tassel, but Doctors of Laws, Doctors of Civil Law, Doctors of Literature, Doctors of Science, Doctors of Philosophy and Doctors of Music shall wear for full dress a black velvet hat with gold cord, similar to that worn by Doctors of Laws of Cambridge University.

Samples of the colours of the linings of all hoods shall be kept for inspection in the office of the Registrar.

For the information of graduates in Great Britain, it may be stated that the gowns and hoods for the various degrees specified above can be purchased from Messrs. Ede, Son & Ravencroft, 93 and 94 Chancery Lane, London, W.C. 2.

FACULTY OF ARTS.

COURSES FOR THE DEGREE OF B.A.

Students may enter the Undergraduate Course by passing either the Junior or the Senior Matriculation Examination. In the former case, in order to obtain the degree of B.A. or B.Sc., they are required to attend regularly the prescribed courses of lectures for four years; in the latter, for three. No course or courses can be counted towards a degree or diploma in the Faculty of Arts except such as have been taken and passed after matriculation requirements have been satisfied and according to the regulations governing the various years of the Undergraduate Course. Undergraduates are arranged in Years, from First to Fourth, according to their academic standing. The respective conditions of passing into the last three years of the course are stated on page 136.

The courses in each department shall be of three hours a week each. The third hour, if not needed for lecture purposes, may, with the consent of the Department, be used by the instructor for conferences or laboratory work.

An undergraduate may proceed to the degree of B.A. by taking either the Ordinary Course or one of the Honour Courses.

1. THE ORDINARY COURSE FOR THE DEGREE OF B.A.

In the First Year six courses shall be taken, i.e., eighteen hours of class work per week; in the Second Year, five courses (fifteen hours); and in the Third and Fourth Years respectively, four courses (twelve hours).

FIRST YEAR.

(*a*) *Compulsory:*

Latin or **Greek.**
English (two hours Literature, one hour Composition).
Mathematics.
But in the case of students taking three languages (exclusive of English), Mathematics shall not be compulsory.
Physical Education (two hours per week).

(*b*) *Elective:*

Three of the following:—
History.
Greek or **Latin**, (if not already taken).
French.
German.
Science (**Physics** or **Chemistry*** or **Biology**).

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*A course in High School Physics is a prerequisite for the Chemistry option.

Details of the work in each subject are given on pages 140 to 177.

Application to take additional courses must be made to the Dean at the beginning of the session.

Advanced Courses.—A student qualified to take work of a more advanced character than the ordinary course of the First Year in any subject, shall, with the consent of the B.A. Advisory Committee, take such advanced work in that subject as the department concerned may recommend. Students taking advanced courses may be excused from the corresponding ordinary courses on the recommendation of the department.

Advisers.—A Board of First Year Student Advisers, consisting for the most part of members of the staff teaching First Year subjects but including also such heads of departments and professors as are willing to act, shall be appointed each year. The Board shall have an Executive Committee of four members and the Chairman of the Executive Committee shall be the Chairman of the Board. The members of the Board, the Executive Committee and the Chairman shall be appointed by the Dean.

For the session 1923-24 the Executive Committee is Dr. A. N. Shaw (Chairman), Dr. Cyrus Macmillan, Associate Professor W. T. Waugh and Assistant Professor R. R. Thompson.

The number of Advisers shall be large enough to preclude the possibility of any one of them having more than ten advisees.

At the end of each session a circular letter explaining the Adviser system shall be sent to the Headmasters of schools that are likely to send students to McGill. With the letter will go a card which the Headmaster and the student will fill out and return to the Registrar. The card will contain such data in regard to the student's record, inclinations and interests as will serve to guide his Adviser in the choice of subjects for which he will register. On the card the student may enter also the name of the professor whom he wishes to have as his Adviser.

The registration days for First Year students for the session 1923-24 will be Thursday and Friday, September 27th and 28th. The students will come to the Registrar's Office, and then, with the card mentioned above and any other documents that may be necessary, they will be passed on to the Advisers, who will be available in adjacent rooms.

All First Year students must see their Advisers at least once a month.

The Board of Advisers shall meet once before the Midyear and once before the Sessional Examinations and at such other times as the Chairman shall determine.

Probation.—Reports on First Year students who are delinquent in their work shall be submitted to the Dean's office by the instructors at two stated dates before Christmas and on one date in the second term (March). A student who in two successive tests is below the required standard in more than one-third of his subjects shall be placed "on probation." If in any three consecutive tests he is below the required standard

in more than one-third of his subjects or if he fails in one-half or more of his subjects at the mid-year examinations, he shall be dropped from the University for that year and shall not be allowed to re-enter the University except with the consent of the Faculty concerned. During his period of "probation" a student shall not be allowed to be a member of a class or college athletic team or to hold office in a class or college society. It is understood that the mid-year examination shall constitute one of the tests.

SECOND, THIRD, AND FOURTH YEARS.

Students shall choose three subjects for continued study through the Second, Third and Fourth Years.

These shall be designated the Continuation Subjects.

In each of the Continuation Subjects a full course, or two half courses, will be taken each year.

Two of the Continuation Subjects may be selected from Division I, of the list below, and one from Division II; or two may be selected from Division II and one from Division I.

Division I	Division II	Division III	Division IV
English.	**Economics.**	**Botany.**	**Education.**
French.	**History.**	**Chemistry.**	**Music.**
German.	**Mathematics.**	**Geology.**	
Greek.	**Philosophy.**	**Physics.**	
Hebrew.	**Political Science.**	**Zoology.**	
Latin.	**Social Science.**		

Physical Education is compulsory in the Second Year (two hours per week).

Additional courses, or the equivalent number of half courses, shall be chosen as follows:—

In the Second Year—Two additional full courses;

In the Third Year—One additional full course;

In the Fourth Year—One additional full course.

Of the additional courses two must be taken from Division III, the remaining two may be selected at will from any of the Divisions.

LIST OF COURSES AND PREREQUISITES

Second Year		Third Year		Fourth Year	
Course	Prerequisite	Course	Prerequisite	Course	Prerequisite
DIVISION I.					
English 3, 4	1 and 2				
French 2	1	4, 5	2	4, 5	2
German 5, 6	1 and summer work, or 2	8, 9, 10, 11, 12, 13	5	8, 9, 10, 11, 12, 13	5
Greek 2	1				
4	2	6	2 or 4	6	2 or 4
Hebrew 1		2, 7	1	2, 7	1
		3	Greek 2	3	Greek 2
		6, 10, 12	1	6 (or 10) 11, 12	1
		9		9	
Latin 2	1	4	2	4	2
DIVISION II					
Economics 1		3, 4, 5	1	6, 7, 8, 9	1 or 2
		6, 7, 8, 9	1 or 2	10, 11, 14, 15	1
History 2	1	3	2	4	3
Mathematics 3	1 or 2	3	1 or 2	3	1 or 2
		4, 5	3	4, 5	3
		6, 7	4	6, 7	4
Philosophy 1, 2		3, 5, 7 or 9	2	3, 5, 7 or 9	2
		6, 13, 14, 15	1	8, 10, 11,	2
				6, 13, 14, 15.	1
Political Science 2		3	2	6, 7, 8, 9	1 or 2
		6, 7, 8, 9	1 or 2	12	
				13	2
Social Science 1		2, 3, 4, 5, 6	1	2, 3, 4, 5, 6, 7, 8	1
					1
DIVISION III.					
Botany 3	1 or 2	4	1 or 2, or Zool. 1	6-8,	3
4	1 or 2, or Zool. 1	5	3	7	3
Chemistry 1		1		1	
Chemistry 2	1	2	1	2	1
Chemistry 3	2	3	2	3	2
Geology 1		1, 2, 3 and 4		1	
			1	2, 3 and 4	1
Physics 2		2		3, 4	2 (and Math. 1 or 2)
3	2 (and Math. 1 or 2)	3, 4	2 (and Math. 1 or 2.)		3, 4 (and Math. 4 or 6.)
		5, 6	3, 4 (and Math. 4 or 6.)	5, 6	5, 6a (and Math. 8)
				7, 8*	
Zoology 1		1		1	
2-4	1	2-5, 7	1	2-5, 7	1
DIVISION IV.					
Education		1		2	1
Music 1		1			
		2	1	2	1

*Physics 3, 4 and Math. 6 may be accepted for 8a in the case of honour students in Chemistry.

Details of the work in each subject are given on pages 140 to 177.

Honour lectures are open to candidates for the Ordinary degree in the Third and Fourth Years, on the recommendation of the Department concerned and with the approval of the Dean.

GENERAL RESTRICTIONS.

The selection of courses within the Continuation Subjects or as additional courses will be under the following restrictions:—

1. A course intended primarily for First Year students may be counted as a full course in the Second Year, but only two-thirds of a course in the Third and Fourth Years.

2. Only those courses may be chosen for which the student has fulfilled the prerequisites laid down by each Department.

3. Students are responsible for seeing that courses chosen do not conflict as regards hours of lectures or laboratory periods.

For regulations governing the double courses in Arts and Applied Science, in Arts and Medicine, and in Arts and Dentistry, see pages 137 to 139.

SUMMER READINGS.

Summer readings are voluntary. The Summer Readings Committee shall, with the aid of the various departments, draw up a list of readings for First Year students each year before the end of the session. This list shall be put into the hands of the student advisers, who will use it as a basis for their suggestions to their advisees on vacation reading. It shall also be posted on the notice boards of the Arts Building and the Royal Victoria College.

In regard to Second, Third and Fourth Year Ordinary students, advice on summer readings shall be given to them by the Heads of the departments in which their continuation subjects are.

Summer readings for Honour students are left in the hands of the departments concerned.

II. HONOUR COURSES FOR THE DEGREE OF B.A.

Honour Courses are offered by the following Departments:—

Chemistry.
Classics.
Economics and **Political Science.**
English.
Geology and **Mineralogy.**
History.
Oriental Languages.
Philosophy.

Honour Courses are also offered by the following combined departments:—

Botany and **Zoology** (**Biology**).
Biology and **Chemistry**.
Economics and **English**.
Economics and **French**.
Economics and **German**.
Economics and **History**.
Economics and **Philosophy**.
Economics and **Social Science**.
English and **French**.
English and **German**.
English and **Greek**.
English and **History**.
English and **Latin**.
English and **Philosophy**.
English and **Political Science**.
English and **Psychology**.
English and **Social Science**.
French and **German**.
French and **Greek**.
French and **History**.
French and **Latin**.
French and **Philosophy**.
French and **Political Science**.
French and **Psychology**.
German and **Greek**.
German and **History**.
German and **Latin**.
German and **Philosophy**.
German and **Political Science**.
German and **Psychology**.
Greek and **Hebrew**.
Greek and **History**.
Greek and **Philosophy**.
History and **Latin**.
History and **Philosophy**.
History and **Political Science**.
Mathematics and **Physics**.
Philosophy and **Political Science**.
Philosophy and **Social Science**.
Political Science and **Social Science**.
Psychology and **Social Science**.

Other Honour Courses in combined departments may be arranged with the approval of the Dean and of the Heads of the departments concerned.

In the Honour Courses in combined departments, when the departments are divided into two sections (as **Classics** into Greek and Latin, **Economics and Political Science** into Economics and Political Science, and **Philosophy** into Philosophy and Psychology), the graduate's certificate shall designate by name the sections in which Honours have been taken (*e.g.*, First Class Honours in Greek, and Second Class Honours in Philosophy). But in Honour Courses in combined departments, when the departments are not divided into sections (as English, History, Social Science, etc.), the graduate's certificate shall indicate that the work done in each of the departments amounts to only half of a full honour course in that department —*e.g.*, First Class Honours in English (one-half) and History (one-half), or First Class Honours in English (one-half) and Second Class Honours in History (one-half).

With the consent of the Dean and of the Heads of the departments, students may take Honours in two departments or in one department and in part of another.

Honour Courses begin in the Second Year. Departments, however, should, whenever possible, have advanced classes for the better students of the First Year.

The conditions for taking up Honour subjects in the Second Year are as follows:—

(a) The student must have passed in five of the six subjects taken in the First Year.

(b) The sanction of the Dean, and of the Head or Heads of the Departments in which Honours are sought, must be obtained.

(c) No student shall take Honours in a subject in which he has failed.

A Second Year Ordinary student who shows exceptional merit in any subject in his Second Year examination may, if he so wishes, and the Head of his Department is satisfied that his knowledge of the subject is sufficient to enable him to reach the standard of Honours by only two more years' study, be allowed to take up the Honour course in that subject in his Third and Fourth Years.

Honour Courses in the Second Year shall consist of 15 hours and in each of the remaining two years 12 hours, covering lectures, conferences and tutorial classes. The work shall also involve wide reading and study in the subject, apart from the actual subjects of lectures, in accordance with a definitely prescribed programme.

Attention is drawn to the fact that lectures will not be given on all parts of the work.

In his Second Year the Honour student must take in addition to courses in his Honour subjects not less than two courses in subjects other than those in which he is taking Honours, these subjects to be chosen on the advice of the Head or Heads of the Departments of his Honour subjects. In either or both of his last two years his work may include, at the discretion of the Head or Heads of the Honour Departments, one course in a subject other than his Honour studies. A student who has failed in any such subject in the Third Year examinations shall not be allowed to continue his Honour course except with the consent of the Faculty.

Honour students who fail to attain Honour standing at the end of the year shall revert to the ordinary courses in their next year, unless they obtain special leave from the Faculty to continue their Honour course on the representation of the Heads of the Departments concerned.

Honour lectures are open to candidates for the ordinary degree in the Third and Fourth Years, on the recommendation of the Department concerned and with the approval of the Dean.

The examinations for Honours will not be conducted exclusively by persons who have given the courses.

III. THE ORDINARY COURSE FOR THE DEGREE OF B.Sc.

An undergraduate may proceed to the degree of B.Sc. in Arts by taking either of the Ordinary Courses or an Honour Course.

There are two Ordinary Courses, designated respectively A and B.

Ordinary Course A.

This course has been arranged to give students a thorough training in science as a preliminary to entering a technical business or profession, or for teaching.

First Year.

Chemistry 1.
English 1 and 2.
French 12.
German 3.
Mathematics 1 or 2.
Physics 1 or 2.

Special arrangements will be made for students who have passed the matriculation examination in German.

Details of the work in each subject are given on pages 140 to 177.

Second Year.

In addition to English, four subjects must be taken, of which three must be selected from Group I below; the fourth subject must be taken from Group II.

Third and Fourth Years.

Two subjects selected from Group I must be continued in the Third and Fourth Years and two other subjects must be taken.

GROUP I.

SUBJECTS.	SECOND YEAR.	THIRD YEAR.	FOURTH YEAR.
Biology.	Zoology 1. Botany 2.	Zoology 2 *or* 4; *or* Botany 6.	Botany 6 *or* Zoology 2 *or* 4.
Chemistry.	2 *or* 3, and 4.	2 *or* 3, and 9.	5, *or* 6 and 8.
Geology.	1.	5 and 6.	2 and 3.
Mathematics.	3.	4 and 5.	8.
Physics.	2 (*or* 3A, if 2 has been taken).	3A (*or* 3B and 4, if 3A has been taken).	3B and 4 (*or* 5A and 8A; *or* 8A and 9).

GROUP II.

SUBJECTS.	SECOND YEAR.	THIRD YEAR.	FOURTH YEAR.
Economics and Political Science.	1 *or* 2.	Any one of:—3, 4 and 5, 6 and 7.	Any one of:—3, 4 and 5, 6 and 7, 10 and 11, 12 and 13, not chosen in the Third Year.
Education.			1 and 2.
English.	3 and 4.	Any one of:—6, 7, 15, 18.	Any one not taken in the Third Year, of 6, 7, 9, 10, 11, 15, 18.
French *or* German.	2. 4 *or* 5.	4 *or* 5. 7 *or* 8.	4 *or* 5. 7 *or* 8.
History.	2.	3.	4.
Philosophy.	Any one of:—1, 2.	3 *or* 5 *or* 7 *or* 9 *or* 14.	3 *or* 5 *or* 7 *or* 9 *or* 10 *or* 14, whichever has not been taken in the Third Year.
Social Science.	1.	2, *or* 3 and 4, *or* 5 and 6.	2, *or* 3 and 4, *or* 5 and 6, any course not taken in the Third Year.

Students selecting Physics, as one of the three subjects of the ordinary B.Sc. course, must also select Mathematics.

Ordinary Course B.

Double Course B.Sc., M.D.

This course in the physical and biological sciences is especially devised for students who might wish to proceed to a degree in Medicine or to advanced work in physiology, biological chemistry, pharmacology or allied subjects. Students intending to enter the Faculty of Medicine must pass the matriculation examination in Latin before admission to the Third Year of the B.Sc. course.

Graduates in this course are qualified to enter the Third Year in the Faculty of Medicine.

First Year.

English 1 and 2.
German 3.
Mathematics 1 *or* 2.
Physics 1.
Chemistry 1.
French 12.

Second Year.

German 4 *or* French 2.
Physics 2.
Botany 1.
Zoology (as in First Year Medicine).
Chemistry 3.

Third Year.

Chemistry 2 and 4.
General Physiology (as in Second Year Medicine).
Physics 3A.
Histology and Embryology (as in Second Year Medicine).
Botany 4.
Zoology 4 and 7.

Fourth Year.

Chemistry 7 and 10.
Anatomy (as in Second Year Medicine) *or* Special Advanced Biology.
Physiology (as in Third Year Medicine).

IV. HONOUR COURSE FOR THE DEGREE OF B.Sc.

Students proposing to take an Honour Course must select one principal subject from Group 1 (page 129), in which subject they must have obtained at least high second class standing in the First Year. If the subject chosen for honours is not offered in the First Year, an aggregate standing of high second class must be obtained in all subjects of the First Year.

Students who fail to retain their honour standing will be required either (1) to repeat the year in honours or (2) to repeat the year in the ordinary course or (3) to proceed to the following year, reverting to the ordinary course at the discretion of the B.Sc. Advisory Committee.

The exact courses of study will be specified by the department concerned. All students will be required to take a course in German 4.

V. COURSE IN ENGINEERING PHYSICS.

There is an increasing demand for men with an advanced knowledge of Mathematics and Physics, who are capable of conducting investigations of a research character. With a suitable training, openings in this field of work may be found in Research Laboratories of the Government and of Electric Corporations, in consulting work, and in University appointments.

In view of these facts, a course in Engineering Physics leading to the degree of B.Sc. in Arts has been arranged. It is open to capable students in Arts or Applied Science:

1. To students in Arts entering their Third or Fourth Year, provided they have satisfactorily passed in the following prerequisites:—

Mathematics 3, 4, 5 (a).

Physics 1 (*or* 2), **3A, 3B, 4.**

2. To students in Applied Science who have completed the Second Year and have received first or second class rank in Mathematics and Physics, subject to the approval of the Heads of the Departments of Electrical Engineering and Physics.

Third Year.

Mathematics 7, 8, 5 (b) (pages 161 and 162).
Physics 5A, 5B, 6B (*or* **8B**) (pages 169 and 170).
Electrical Engineering 113, 114 (see page 245.)

During their summer vacation at the end of the Second Year, students must spend three months at an approved shop or radio station.

Fourth Year.

Mathematics 9 *or* **10** (page 162).

Physics 6A, 7A, 7B, 8A and 6B (*or* **8B**). See page 170. (Summer Thesis or Shop Work.)

The student may now receive the degree of B.Sc. in Arts, with honours in Mathematics and Physics. In the Fifth Year the student should take the whole of the Fourth Year course for Electrical Engineering (See pages 245 and 246) and also Physics 9 and 12 *or* 14 (6A has already been taken), and proceed with research work and a thesis with a view to an M.Sc. degree.

The course must therefore cover five years and should cover six. During the last year (the sixth), opportunity would usually be afforded to act as demonstrator with a salary.

VI. DEGREE OF B.Sc. IN AGRICULTURE (B.Sc. in Agr.).

A four-year professional course, leading to the degree of Bachelor of Science in Agriculture (B.Sc. in Agr.), designed to prepare students to teach science and agriculture subjects in the academies of the province, is offered by the Faculty of Arts, McGill University, and Macdonald College.

This course is endorsed by the Faculties of Arts, Science and Agriculture of McGill University, and approved by the Protestant Committee of the Council of Public Instruction of the Province of Quebec.

The main object of this course is to improve science teaching, and to provide for a variety of subjects that are at present outside the qualifications of the existing academy teachers.

First Year (at McGill).

English, 1 and 2.	Zoology 1.
Mathematics 1, or 2.	Botany 2.
French 12.	Chemistry 1.
German 3.	

Second Year (at McGill).

English 4.	Zoology 2.
French 2.	Chemistry 2.
Botany 3.	

Third and Fourth Years (at Macdonald College).

The work of the Third and Fourth Years of this course is taken at Macdonald College. For a detailed statement of the studies included therein, write to the Principal, Macdonald College, Que.

VII. DEGREE OF BACHELOR OF HOUSEHOLD SCIENCE (B.H.S.).

The first two years are to be taken in the Faculty of Arts, and the last two in the School of Household Science of Macdonald College, but the Dean, or the B.A. Advisory Committee of the Faculty of Arts of McGill University, must pronounce on the qualifications of a candidate before he or she can be admitted to the Third Year of this course.

The two years in the Faculty of Arts may be either in the B.A. or the B.Sc. course as follows:—

B.A. Course—First Year.

Compulsory:

Greek 1 *or* 2, *or* Latin 1.	*Mathematics 1 *or* 2.
English 1 and 2.	Chemistry 1.

And any two of the following:

History 1.	French 1.
Latin 1, *or* Greek 1 *or* 2.	German 1 *or* 2.
(if not already taken.)	

*If three languages (exclusive of English) are taken, Mathematics may be omitted.

Second Year.

Students shall choose two subjects out of Division I and one out of Division II; or two out of Division II and one out of Division I. In addition they must take two other subjects. One of these must be Chemistry. The other may be chosen from any of the divisions.

Division I.	Division II.	Division III.	Division IV.
Greek.	History.	Botany.	Education.
Latin.	Philosophy.	Chemistry.	Music.
English.	Economics.	Geology.	
French.	Pol. Science.	Physics.	
German.	Social Science.	Zoology.	
Hebrew.	Mathematics.		

B.Sc. Course—First Year.

Chemistry 1.
English 1 and 2.
French 12.
German 3.
Mathematics 1 *or* 2.
Physics 1 *or* 2.

Second Year.

English *or* French *or* German.
Biology (Botany 2 and Zoology 1); Chemistry 2.

And one course from among the following: Geology 1; Mathematics 3; Physics 2 *or* 3A; Economics 1 *or* 2; English 4; History 2; Philosophy 1 *or* 2; Social Science 1.

Third Year (at Macdonald College).

Bacteriology 4.
Biology 2.
Chemistry 5.
Economics 2.
English 2
Foods 2, 6.
Principles of Teaching 1.
Textiles and Clothing 4.
The Home 1, 2.

Fourth Year (at Macdonald College).

Bacteriology 5, 6.
Chemistry 6.
Dietetics 2, 3.
English 3.
Physics 3.
Principles of Teaching 2.
The Institution 3.

For details of the work in each course see Macdonald College Announcement.

PARTIAL STUDENTS.

Students desiring to take a Partial Course in Arts are required to pass the matriculation examination in the subject or subjects which they intend to study, or, failing this, they must satisfy the Head of the Department as to their ability to follow the course. Subject to the above limitations, lectures are open to partial students in both Honour and Ordinary Courses, but no course or courses taken by such students can count for a degree, except by virtue of a special vote of Faculty. Medals, scholarships, exhibitions and prizes shall not be awarded to partial students. A certificate of standing can be obtained from the Dean if requested. A partial student who fails in any subject at the first term examinations shall be allowed to continue that subject only on the recommendation of the Head of the Department concerned.

LIMITED UNDERGRADUATES.

Students who have matriculated, but who for special reasons are not able to follow the regular curriculum of four years, may, if those reasons appear satisfactory to the Dean, be accorded the status of Limited Undergraduates. Such Limited Undergraduates may distribute their work for the degree over five, but not over more than eight years, on the understanding that the sequence and arrangement of courses shall follow the requirements laid down in the regular undergraduate curriculum, and shall conform to the time-table.

Limited Undergraduates will not be eligible for Honour courses, scholarships, exhibitions, bursaries or prizes of any description. For fees see page 103.

EXAMINATIONS IN ARTS.

There are two examinations in each session, the Intermediate and the Final. Intermediate Examinations are held either at the end of the first term, or at such intervals during the session as each department may prescribe. In the Second, Third and Fourth Years, Intermediate Examinations will be held or not, as may be determined by each department.

Students prevented by illness from attending the Intermediate Examinations will, on presenting a medical certificate to the Dean, be given sessional standing on the result of the Final Examination.

Seventy-five per cent. of the marks given for the sessional work in each subject will be assigned to the Final Examination.

Successful students are arranged in three classes.

Distinction in an Ordinary Degree.—For an ordinary degree with distinction the candidate shall obtain 75 per cent. of the maximum marks assigned in half the subjects taken in the Third and Fourth Years and not less than 60 per cent. in the remainder.

Examinations supplemental to Final Examinations are held in the month of September simultaneously with the matriculation examination. The date of the supplemental examinations will be fixed by the Faculty and no examination will be granted at any other time, except by special permission of the Faculty, and on payment of a fee of ten dollars.

ADVANCEMENT FROM YEAR TO YEAR.

Advancement to the Second Year—A student may proceed to the Second Year with any one full course (or its equivalent) unpassed. (This cannot, however, be a Junior Matriculation subject.)

Advancement to the Third Year.—A student may proceed to the Third Year with any one full course (or its equivalent) unpassed, unless that full course (or any part of it) belongs to the First Year.

Advancement to the Fourth Year.—A student may proceed to the Fourth Year with any one full course (or its equivalent) unpassed, unless that full course (or its equivalent) belongs to the Second Year of his course.

Repeating a Year.—By special permission of the Faculty, a student who is required to repeat a Year may, on application:—

(a) Be exempted from attending lectures and passing examinations in the subjects in which he has already passed;

(b) Be permitted to take, in addition to the subjects in which he has failed, one of the subjects of the following Year in his course.

N.B.—The choice of subjects must involve no conflict of hours as printed in the time-table.

DOUBLE COURSES.

ARTS AND APPLIED SCIENCE.

Candidates for the degree of B.A. and B.Sc. (Applied Science) in six years will take the first three years in Arts. They will then enter the Faculty of Applied Science and devote the remaining three years entirely to the work of that faculty. Only students in good standing will be permitted to take the course. Those who wish to do so must notify the Dean of the Faculty of Applied Science before the close of their First Year in Arts (May).

Descriptive Geometry, Freehand Drawing and Mechanical Drawing.—Not later than October 10th of their Second Year in Arts students intending to enter this course must see the Heads of the Departments concemed and make arrangements with them for procuring private instruction in these subjects. They must report to them from time to time, and after they have given evidence of having covered the ground adequately they will be given an examination.

Shop-work.—The shop-work may be taken in two periods of two weeks each in successive years in the second half of May *immediately after* the close of the Arts examinations.

Surveying.—One half of their surveying fieldwork may be done in the fortnight *immediately after* the completion of their Third Year; the rest of it in the latter part of the following September in connection with the Survey School then held for Fourth Year Civil Engineering students. In some cases it may be possible to do the whole of the survey fieldwork in September in the School mentioned above. Students desiring to do this should apply to the Dean of the Faculty of Applied Science not later than the 1st of May.

The requirements for each of the three years in the Faculty of Arts are as follows:—

First Year.

The curriculum as laid down for the B.A. degree, except that Physics and Mathematics and a modern language must be taken. It is recommended that Mathematics 2 be taken instead of Mathematics 1.

Second Year.

English 3.

French 2 *or* **German 5** (both continuation subjects).

Mathematics 3 and 5A (students who have taken 2 may substitute 4 for 3).

Physics 3B and 4.

And two of the following:—

Economics, Course 1 in the Department of Economics and Political Science.

English 4.

French 2 (if not already taken).

German 5 (if not already taken).

Greek 2 *or* **4.**

History 2.

Latin 2.

Philosophy 2.

Political Science, Course 2 in the Department of Economics and Political Science.

Psychology, Course 1 in the Department of Philosophy.

Third Year.

Physics 2.

Any three of the following:—

English, any one of 4 to 12 inclusive; Latin 4; French 4; German 7; Philosophy 3, 5, 7, *or* **6** *or* **9** *or* **14; History 3** *or* **4; Economics and Political Science 3 to 15** (any full course *or* the equivalent of a full course).

The degree of B.A. will be conferred on double course students in Arts and Applied Science on the completion of the prescribed curriculum in Arts and the requirements of the Second Year in Applied Science.

ARTS AND MEDICINE.

The degree of B.A. and M.D. may be obtained in eight years, of which the first two shall be taken in the Faculty of Arts, and the remaining six in the Faculty of Medicine. The course in Arts is as follows:—

I. B.A., M.D.

First Year.

The subjects of the First Year shall be the same as those for the First Year of the B.A. course.

Second Year.

Any five of the following:—

Economics, Course 1 in the Department of Economics and Political Science.

English 4.
French 2 (continuation subject).
German 5 (continuation subject).
Greek 2 *or* **4** (continuation subject).
History 2.
Latin 2 (continuation subject).
Mathematics 3 *or* **4** (continuation subject).
Philosophy 2.

Political Science, Course 2 in the Department of Economics and Political Science.

Psychology, Course 1 in the Department of Philosophy.

The degree of B.A. will be conferred on the completion of the above curriculum in Arts and of the Second Year in Medicine.

II. B.Sc., M.D.

For the requirements of the B.Sc., M.D. course see page 130.

ARTS AND DENTISTRY.

The degrees of B.A. and D.D.S. may be obtained in six years, of which the first two shall be taken in the Faculty of Arts and the remaining four in the Faculty of Dentistry. The course in Arts is the same as that prescribed for the double course of B.A., M.D. (see I, above).

B.COM. AND B.A.

Graduates in Commerce who desire to obtain the degree of B.A. may be admitted to the Third Year in Arts provided that at some time before entering Third Year Arts they shall have taken Latin 1 of the B.A. curriculum, or an equivalent.

ARTS AND THEOLOGY.

Students who are pursuing a double course in Arts and Divinity (six years at least) will take in the Third and Fourth Years the courses which constitute the ordinary curriculum in Arts, less a half course in each of these Years, or a whole course in either.

COURSES OF LECTURES IN ARTS.

The hours of all ordinary lectures and most of the honour lectures are indicated. In the case of the other honour lectures the hours will be arranged by the several departments at the opening of the session.

DEPARTMENT OF BOTANY.

PROFESSOR:—FRANCIS ERNEST LLOYD.
PROFESSOR OF MORPHOLOGICAL BOTANY:—CARRIE M. DERICK.
ASSISTANT PROFESSOR:—GEORGE W. SCARTH.
DEMONSTRATOR:—JENNIE L. SYMONS.

1. **General Biology (Plants).** Parts I (October) and III (March to April) as in First Year Medicine.
   3 hrs.; Tu., Th., Sat., at 12..6 hrs. lab..Professor Lloyd, Mr. Scarth.
   (Mornings, alternating with Chemistry I.)
2. **General Botany.** Introductory Course. First Year.
   2 hrs., 2nd term; Wed., Fri., at 2..2 hrs. lab.; Mon. 2-4.
   Professor Lloyd, Mr. Scarth, and Miss Symons.
3. **Plant Morphology and Taxonomy.** Second Year.
   3 hrs.; Tu., Th., Sat., at 9..4 hrs. lab..Professor Derick, Miss Symons.
4. **Genetics.** Second or Third Year.
   2 hrs.; Mon., Wed., Fri., at 9..2 hrs. lab.
   Professor Derick, Miss Symons.
   (May be taken without laboratory work.)
5. **Histology: Microtechnic.** Second or Third Year.
   3 hrs.; Mon., Wed., Fri., at 2..4 hrs. lab.
   Professor Lloyd, Miss Symons.
6. **Introductory General Physiology.** Third or Fourth Year Arts, First Year Medicine.
   3 hrs.; Mon., Wed., Fri., at 9..4 hrs. lab.
   Professor Lloyd, Mr. Scarth, Miss Symons.
7. **Plant Pathology.** Fourth Year.
   3 hrs.; Mon., Wed., Fri., at 2..4 hrs. lab.
   Professor Derick, Miss Symons.
8. **Plant Physiology: Problems.** Third or Fourth Year Arts. 2nd term;
   3 hrs. reading..4 hrs. lab.....Professor Lloyd, Mr. Scarth.
9. **Pharmaceutical Botany.** 2 hrs.....Miss Symons.
10. **Taxonomy: Method.**
    A short course in April on request.

HONOUR COURSE IN BIOLOGY.

Prerequisites: General Biology., Parts I, II and III. (Botany 1 and Zoology 0; *or* Botany 2 and Zoology 1, together with Chemistry 1 *or* Physics 1.)
Second Year: Botany 3 and 4 (with laboratory work); Zoology 2; Physics 1, *or* Chemistry 1.
Third Year: Botany 5 and 6; Zoology 3 and 6.
Fourth Year: Botany 7 and 8; Zoology 4 and 5.

Honour students should acquire a reading knowledge of scientific French and German. For Genetics and Physiology an elementary knowledge of statistical methods is advised.

GRADUATE COURSES.

See page 423.

DEPARTMENT OF CHEMISTRY.

DIRECTOR:—R. F. RUTTAN.

PROFESSOR OF BIO-CHEMISTRY:—A. B. MACALLUM.

PROFESSOR OF INORGANIC CHEMISTRY:—F. M. G. JOHNSON.

ASSOCIATE PROFESSORS:—N. N. EVANS. OTTO MAASS. G. S. WHITBY.

ASSISTANT PROFESSORS:—A. R. MCLEAN. H. W. HATCHER.

DEMONSTRATORS:—J. DOLID. DOROTHY CHARLTON. L. J. WALDBAUER. W. W. THOMSON. A. CAMBRON. G. W. HOLDEN. P. LAROSE. J. W. MCKINNEY. R. S. JANE.

(Unless otherwise specified, all lectures and laboratory courses are given in the Chemistry Building.)

1. General Chemistry.

3 hrs.; Mon., Wed., Fri.

Section A—Professor Ruttan at 12.

Section B—Associate Professor Evans at 3.

4 hrs. lab., Tu., Th., 3 to 5.

Assistant Professor MacLean, Miss Charlton and Messers. Cambron, McKinney, and Thomson.

Text-Books:—Alex. Smith, General Chemistry for Colleges, new edition; Smith's Intermediate Chemistry.

2. Organic Chemistry. (No. 56 Fac. App. Sci.).

3 hrs., 1st term; Tu., Th., Sat., at 12.....Professor Ruttan.

2 hrs. 2nd term; Th. and Sat., at 12.....Professor Ruttan.

6 hrs. lab., 2nd term. Associate Professor Whitby, Assistant Professor MacLean, and Messrs. Dolid, Cambron, Miss Charlton and McKinney.

Text-Books:—Remsen or Perkin and Kipping; Norris' Experimental Organic; Moureu's Organic Chemistry.

3. Analytical Chemistry.

(a) Qualitative Analysis.

1 hr., 1st term; 9 hours lab.

Associate Professor Evans, Miss Charlton, and Messrs. Cambron and Thomson.

Text-Book:—Stieglitz, Quantitative Analysis.

(b) Quantitative Analysis.

1 hr., 2nd term; 12 hrs. lab.

Professor Johnson and Messrs Larose, Jane and Cambron.

Text-Book:—Cumming and Kay, Quantitative Analysis.

4. Elementary Physical Chemistry (No. 58 Fac. App. Sci.).

2 hrs., 1st term; Mon., Fri., at 12.....Associate Professor Maass.

Text-Book:—Walker, Introduction to Physical Chemistry.

***5. Organic Chemistry (Advanced)** (No. 64 and 65 Fac. App. Sci.).

3 hrs.; Mon., Wed., Fri., at 10.....Associate Professor Whitby.

12 hrs. lab.

Professor Ruttan, Associate Professor Whitby, Assistant Professor MacLean, and Messrs J. Dolid and Cambron.

***6. Inorganic Chemistry (Advanced).** (No. 72 Fac. App. Sci.).

3 hrs.; Tu., Th., Sat., at 11.....Professor Johnson.

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*Courses for Graduates and Honour students.

*7. **Physical Chemistry (Advanced).** (No. 66 Fac. App. Sci.).
2 hrs.; Wed., Fri., at 9 ..... Associate Professor Maass.
6 hrs. lab.; Mon., Wed., 2 to 5.
Associate Professor Maass and Mr. Waldbauer.

8. **Quantitative Analysis (Advanced).** (No. 62 Fac. App. Sci.).
1 hr., Professor Johnson and Messrs. Larose, Cambron and Jane.
12 hrs. lab.

9. **Historical Chemistry.** (No. 74 Fac. App. Sci.).
1 hr., 2nd term ..... Associate Professor Maass.

10. **Biological Chemistry.**
2 hrs., 2nd term; Tu. and Th., at 12.
(Biological Building.) .... Professor A. B. Macallum.
6 hrs. lab., 2nd term; Tu. and Fri., 2 to 5.
(Biological Building.)
Professor. A. B. Macallum and Dr. Simpson.

Text-Book:—Hawk, Practical Physiological Chemistry.

*11. **Biological Chemistry (Advanced).**

5 hrs. lab., 2nd term.

(Biological Building.)
Professor A. B. Macallum and Mr. G. E. Simpson.

12. **Electro-Chemistry.** (No. 70 Fac. App. Sci.).
2 hrs., 1st term; Mon., at 9, Fri., at 12 ..... Associate Professor Maass.

13. **Food Chemistry.** (No. 73 Fac. App. Sci.).
1 hr., 2nd term; Th., at 10 ..... Professor Ruttan.
6 hrs. lab., 2nd term.

Associate Professor Whitby and Assistant Professor MacLean and Messrs. Dolid and McKinney.

Text-Book:—Woodman's Food Analysis.

14. **Industrial Inorganic Chemistry.** (No. 68 Fac. App. Sci.).
2 hrs., 1st term; Wed., Fri., at 11 ..... Professor Johnson.

15. **Industrial Organic Chemistry.** (No. 69 Fac. App. Sci.).
2 hrs., 2nd term; Wed., Fri., at 11 ..... Professor Johnson.

*16. **Colloid Chemistry.** (No. 75 Fac. App. Sci.).
2 hrs., 2nd term, with lab ..... Professor Johnson.

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*Courses for Graduates and Honour Students.

HONOUR COURSE IN CHEMISTRY.

Second Year: Chemistry 1.

Third Year: 2, 3, 4; Physics 2; and a half-course in Calculus or Biology or Geology or Mineralogy or scientific German.

Fourth Year: (a) 5, 7, 9, 10 (11 optional), or, (b) 6, 7, 8, 9; Physics 3.

HONOUR COURSE IN CHEMISTRY AND BIOLOGY.

Prerequisites: French 12; German 3; Physics 1.

Second Year: Chemistry 1; Botany 2; Zoology 1; French 2 and German 4.

Third Year: Either Physics 2 or French 4 or German 7 and Chemistry 2 (first term only), 3 (a) and 10; Zoology 2; Botany 3 or 6.

Fourth Year: A full course in Physics or Biology or advanced Chemistry and Chemistry 3 (b), 11 or 16; Zoology 4; Botany 5.

DEPARTMENT OF CLASSICS.

PROFESSOR:—W. D. WOODHEAD.

PROFESSOR OF GREEK:—SAMUEL B. SLACK.

ASSISTANT PROFESSORS:— ALEXANDER M. THOMPSON. CLIVE H. CARRUTHERS.

SESSIONAL LECTURER AND TUTOR (ROYAL VICTORIA COLLEGE):—
ELIZABETH A. IRWIN.

Greek

All students taking Greek are expected to provide themselves with a grammar, a Greek-English dictionary, a classical dictionary, and an atlas of ancient geography. The following are recommended: Goodwin's Greek Grammar (Ginn & Co.); Liddell and Scott's Greek Lexicon (abridged or intermediate); Putzger's Historischer Schulatlas (Velhagen und Klasing, Leipzig); Smith's Smaller Classical Dictionary (Everyman Series, Dent).

1. Beginners' Greek.

3 hrs.; Section 1 (men); Tu., Th., Sat., at 10.
Assistant Professor Carruthers.

Section 2 (women): Tu., Th., Sat., at 10. . . . . Professor Slack.

Text-Books:—Burgess and Bonner (Scott, Foresman & Co.); Passages for Greek Translation (Peacock & Bell, Macmillan).

2. **Greek.** First and Second Years.

3 hrs.; Mon., Wed., Fri., at 11.....Assistant Professor Thompson.

Xenophon, Anabasis, I (Goodwin and White, Ginn & Co.); Homer, Iliad XXII (Pitt Press Series, Cambridge University Press); Translation at sight (Peacock and Bell, Macmillan).

4. **Greek.** Second Year.

3 hrs.; Tu., Th., Sat., at 11.....Assistant Professor Carruthers.

Plato, Apology (Adam, Cambridge University Press); Homer, Odyssey IX, vv. 216-566 (Pitt Press Series, Cambridge University Press); Euripides, Alcestis (Blakeney, Bell's Illustrated Classics); Translation at sight (Jerram, Anglice Reddenda, Second Series, Oxford University Press).

5. **Greek.** Third and Fourth Years. Prerequisite: 2 or 4.

3 hrs.; To be given in 1924–25.

Herodotus IX (Evelyn Abbott, Oxford University Press); Demosthenes, On the Peace, Philippic II, Chersonese, Philippic III (Sandys, Macmillan); Euripides, Medea (Heberden, Oxford University Press); Translation at sight (Fowler, Sportella).

6. **Greek.** Third and Fourth Years. Prerequisite: 2 or 4.

3 hrs.; Tu., Th., Sat., at 10.....Assistant Professor Thompson.

Plato, Crito (Stock, Oxford University Press); Aristophanes, Frogs (Merry, Oxford University Press); Aeschylus, Prometheus Bound (Prickard, Oxford University Press); Translation at sight (Models and Exercises in Unseen Translation, Fox and Bromley, Oxford University Press).

Honour Course in Greek.

This will consist of 2 *or* 4, 5, 6 and the following:—

11. **Greek.** Second Year.

3 hrs.; Tu., Th., Sat., at 9.....Professor————————

Homer, Odyssey X, XI (Pitt Press Series, Cambridge University Press); Sophocles, Antigone (Wells, George Bell & Sons); Lucian, Menippus (Mackie, Pitt Press Series, Cambridge University Press).

12. **Greek.** Third and Fourth Years.

3 hrs. To be given in 1924–25.

Thucydides VII (Holden, Pitt Press Series, Cambridge University Press); Plato, Republic I, II as far as 367 E (Warren, Republic I-V, Macmillan); Theocritus (Kynaston, Oxford University Press); Translation at sight (Models and Exercises in Unseen Translation, Fox and Bromley, Oxford University Press).

13. Greek. Third and Fourth Years.

3 hrs.; Tu., Th., Sat., at 11 . . . . . Professor Slack.

Homer, Iliad VII, VIII; Aristotle, Ethics I, II (Oxford Classical Text); Theophrastus, Characters (Oxford Classical Text); Translation at sight (Models and Exercises in Unseen Translation, Fox and Bromley, Oxford University Press).

Latin.

All students taking Latin are expected to provide themselves with a grammar, a Latin-English dictionary, a classical dictionary, and an atlas of ancient geography. The following are recommended:—Sonnenschein, New Latin Grammar (Clarendon Press, 1912); Lewis, School Dictionary, or White, Junior Students' Latin-English Dictionary; Smith, Smaller Classical Dictionary (Everyman Series, Dent).

The following books are also recommended: Roman History, Literature and Antiquities, by A. Petrie (Oxford Univ. Press); Putzger's Historischer Schulatlas (Velhagen und Klasing, Leipzig).

1. Latin. First Year.

3 hrs.; Mon., Wed., Fri., at 10.

Section 1 (men), Professor ————; section 2 (men), Assistant Professor Thompson; section 3 (women), Assistant Professor Carruthers; section 4 (women), Professor Slack.

Cicero, De Senectute (Rockwood, American Book Co.); Horace, Odes I (Page, Macmillan's Elementary Classics); Composition (Writing of Narrative Latin by B. W. Mitchell, American Book Co.); and Translation at sight (Rivingtons' Class Books of Latin Unseen, Book II).

2. Latin. Second Year.

3 hrs.; Tu., Th., Sat., at 12 . . . . . Assistant Professor Thompson.

Livy, Book XXI (Tatham, Clarendon Press); Horace, Odes, Book II (Page, Macmillan's Elementary Classics); Virgil, Aeneid, Book IV (Sidgwick, Pitt Press Series, Camb. Univ. Press); Translation at sight (Jerram, Anglice Reddenda, Second Series, Oxford University Press).

3. Latin. Third and Fourth Years.

3 hrs. To be given in 1924–25.

Cicero, Letters (Abbott, Ginn & Co.); Plautus, Captives (Morris, Ginn & Co.); Tacitus, Agricola; (Pearce, Bell's Illustrated Classics) Translation at sight (Alford, Macmillan).

4. Latin. Third and Fourth Years.

3 hrs.; Tu., Th., Sat., at 9 . . . . . Professor Slack.

Pliny, Selected Letters (Prichard & Bernard, Oxford University Press); Selections from the Roman Elegiac Poets (Carter, D. C. Heath); Martial (Post, Ginn & Co.); Translation at sight (Alford, Macmillan).

At the beginning of the second term, if not before, an advanced class will be formed to prepare for Second and Third Year Scholarships. This class will be open to qualified students of the first two years. .Professor Slack.

Honour Course in Latin.

This will consist of 2, 3, 4 and the following:—

11. Latin. Second Year.
3 hrs.; Mon., Wed., Fri., at 9.....Assistant Professor Carruthers.
Terence, Adelphi (Sloman, Oxford University Press); Catullus (Simpson, Macmillan); Lectures on Roman Literature.

12. Latin. Third and Fourth Years.
3 hrs. To be given in 1924–25.
Livy I (Freeman, Oxford), Lectures on the History of the Republic; Tacitus, Annals I, II (Furneaux, Annals I-IV, Oxford); Lectures on the History of the Empire.

13. Latin. Third and Fourth Years.
3 hrs.; Mon., Wed., Fri., at 9.....Professor ————
Juvenal I, III, V, VII, VIII, X (Wilson, D. C. Heath); Suetonius, Tiberius and Nero (Pike's Suetonius, Selected Lives, Allyn and Bacon, Boston); Lectures on the Private Life of the Romans (illustrated).

Additional Readings:
Third Year:—Horace, Satires I, except 2, 3, 7, 8 (Kirkland, Sanborn & Co.); Terence, Phormio (Sloman, Oxford University Press.)
Fourth Year:—Seneca (Select Letters, Summers, Macmillan, pp. 3-51); Virgil, Georgics I.

Honour Course in Classics.

Greek: 2 or 4, 5, 6, 11, 12, 13.
Latin: 2, 3, 4, 11, 12, 13.

Graduate Course in Classics.

See page 408.

DEPARTMENT OF ECONOMICS AND POLITICAL SCIENCE.

PROFESSOR:—STEPHEN LEACOCK.
ASSOCIATE PROFESSORS:—J. C. HEMMEON. D. J. DAY
ASSISTANT PROFESSOR:—H. M. FYFE
GRADUATE FELLOW:—C. PETERSON (1922-23).

1. **Elements of Political Economy.** Second Year.
3 hrs.; Mon., Wed., Fri., at 11, Professor Leacock and Associate Professor Hemmeon.

2. **Elements of Political Science.** Second Year.
3 hrs.; Mon., Wed., Fri., at 12., Professor Leacock and Associate Professor Hemmeon.

3. **Political and Social Theories of Modern Times.** Third Year.
3 hrs.; Mon., Wed., Fri., at 2.....Professor Leacock.

4. **Labour Problems.** Third Year.
3 hrs.; 1st term: Tu., Th., Sat., at 11, Associate Professor Hemmeon.

5. **Money and Banking.** Third Year.
3 hrs.; 2nd term: Mon., Wed., Fri., at 10, Assistant Professor———

6. **The Government of Canada.** Third and Fourth Years.
3 hrs.; 1st term, in alternate years, beginning 1923-24, Mon., Wed., Fri., at 3.....Professor Leacock.

7. **Canada: Industrial and Economic Problems.** Third and Fourth Years.
Second Term in alternate years, beginning 1923-24, Tu., Th., Sat., at 11.....Associate Professor Hemmeon.

8. **Political Economy till 1776.** Third and Fourth Years.
First Term in alternate years, beginning 1924-25, Tu., Th., and Sat., at 11.....Associate Professor Hemmeon.

9. **Political Economy from 1776.** Third and Fourth Years.
Second Term in alternate years, beginning 1924-25, Mon., Wed., and Fri. at 3.....Professor Leacock.

10. **International Trade, Trade Policy and Transportation.** Fourth Year.
First Term, Mon., Wed., Fri., at 10.....Assistant Professor———

11. **Public Finance.** Fourth Year.
Second Term, Tu., Th., Sat., at 12....Associate Professor Hemmeon.

12. **Social and Industrial Legislation.** Fourth Year and Graduate Students.
First Term in alternate years, beginning 1923-24, Mon., Wed., Fri., at 12.....Assistant Professor ————

13. **Great Britain: Economic and Fiscal Problems.** Fourth Year and Graduate Students.
Second Term in alternate years, beginning 1923-24, Mon., Wed., Fri., at 12.....Assistant Professor ————

14. **Economic Factors in the Evolution of Society (till 1800).** Fourth Year and Graduate Students.
First Term in alternate years, beginning 1924-25, Mon., Wed., Fri., at 12.....Assistant Professor ————

15. **Economic Factors in the Evolution of Society (after 1800).** Fourth Year and Graduate Students.
Second Term in alternate years, beginning 1924-25, Mon., Wed., Fri., at 12.....Assistant Professor ————

For the courses in Economics and Political Science given in the School of Commerce, see page 196.

Honour Course.

Students taking the full honour course in Economics and Political Science take in their Second Year courses 1 and 2 together with three other courses as approved by the Department; and in their Third and Fourth Years the courses indicated above; together with one approved course from another department in each year.

Students taking honour courses in the whole or in half of another department (see page 127) may be granted honours in Economics (without Political Science) by taking courses 1, 2, 4, 5, 10, 12 *or* 14 and either 6 and 7, *or* 8 and 9; similarly, students taking honour courses in the whole or in half of another department may be granted honours in Political Science (without Economics) by taking courses 1, 2, 3, 11, 13 *or* 15 and either 6 and 7, *or* 8 and 9.

Graduate Courses.

See page 414.

GRADUATE FELLOWSHIPS.

The following Graduate Fellowships are awarded annually in the department:—

The ALLEN OLIVER FELLOWSHIP (see p. 98), tenable at McGill or elsewhere, as sanctioned by the department; $500 for one year.

The MONTREAL MANUFACTURERS' GRADUATE FELLOWSHIP (see p. 99): $800 for one year. The holder of this fellowship must devote himself especially to a subject connected with the trade and industry of Canada.

THE GRADUATE (WORKING) FELLOWSHIP: $800 a year. The holder of this fellowship is required to devote one-third of his time to the work of the University in the correction of junior exercises, etc.

DEPARTMENT OF EDUCATION.

DEAN OF THE SCHOOL FOR TEACHERS, MACDONALD COLLEGE, AND PROFESSOR OF EDUCATION:—SINCLAIR LAIRD.

1. **Principles of Education; Psychology of Education; History of Education.**
   3 hrs., 1st term; Mon., Wed., Fri., at 5.
   (To be taken preferably in the Third Year.)

2. (1) **Methods of Teaching.**
   A. Principles of general method.
   B. Special methods in elementary subjects.
   C. Special methods in High School subjects.
   (2) **School and Class Management.**
   A. School administration, and school law and regulations of the Province of Quebec.
   B. Class management and discipline.
   3 hrs., 2nd term; Mon., Wed., Fri., at 5.
   (To be taken in Fourth Year.)

Courses 1 and 2 are required for the High School Diploma of the Province of Quebec, together with (a) fifty half-days of practice teaching and criticism lessons under expert supervision; and (b) a course in physical education qualifying for the Strathcona Certificate, Grade B. This course is taken in the Fourth Year before Christmas.

THE TRAINING OF TEACHERS.

THE HIGH SCHOOL DIPLOMA.

The Protestant Central Board of Examiners of the Province of Quebec have laid down the following requirements for the High School Diploma:—

1. Graduation from some Canadian or other British University, with degree courses that are considered by the Central Board satisfactory preparation for the work of the teacher.

2. The successful completion of courses 1 and 2 in the Department of Education.

3. The possession of the Strathcona Certificate, Grade B, after completion of a course in physical training. Miss Cartwright, Dr. Lamb.

4. Successful completion of at least fifty half-days of practice teaching and criticism lessons under expert supervision (unless the candidate holds an intermediate diploma or shows an equivalent in successful teaching experience which would be accepted by the Central Board).

Candidates for this, the highest teaching diploma of the Province, are recommended to take courses 1 and 2 in the Department of Education during the last two years of their undergraduate course, preferably Course 1 in the Third Year and Course 2 in the Fourth Year.

ELEMENTARY, INTERMEDIATE AND KINDERGARTEN DIPLOMAS.

The training for these diplomas is given at Macdonald College. (See Macdonald College Announcement.)

COURSES FOR TEACHERS OF SPECIAL SUBJECTS.

French. A summer school for teachers of French leading to a Specialist Diploma recognized by the Council of Public Instruction.

Kindergarten Assistants. A two-session course held in Montreal and leading to a Kindergarten Assistant's Diploma, according to the regulations of the Protestant Committee of the Council of Public Instruction. This diploma is accepted for entrance to the Kindergarten class at Macdonald College. (The course is conducted by the School for Teachers, Macdonald College.)

Particulars of the above courses, which are published separately, may be obtained on application to the Registrar.

Physical Education. A two-years' course leading to a diploma for Teachers in Physical Education recognized by the Council of Public Instruction. (This course is given under the Department of Physical Education.)

DEPARTMENT OF ENGLISH.

PROFESSOR OF ENGLISH AND OF COMPARATIVE LITERATURE:—

P. T. LAFLEUR.

ASSOCIATE PROFESSORS:— CYRUS MACMILLAN. G. W. LATHAM.

ASSISTANT PROFESSOR:—H. G. FILES.

LECTURER:—A. S. NOAD.

ASSISTANTS:— A. R. McBAIN. MISS M. C. EDWARDS. H. R. AVISON. R. F. HALL. M. MacODRUM. R. S. READ.

1. **English Composition.**

1 hr.; Sat., at 12.....Assistant Professor——Mr. Noad, Miss Edwards and Assistants.

Section and conference hours to be arranged.
Required of all First Year undergraduates.

2. **English Literature: General Course.**

2 hrs.; Tu., Th., at 12.....Associate Professor Macmillan and Assistants.

Conference hours to be arranged.
Required of all First Year undergraduates.

3. **English Composition.**

An advanced course open to a limited number of students who desire more practice in writing after having completed English 1.

4. **English Prose from Bacon to Stevenson.**

3 hrs.; Mon., Wed., Fri., at 3.....

Associate Professor Latham, Asst. Professor—— and Mr. Noad.

5. **Spenser and Milton.**

3 hrs. 1st term; Mon., Wed., Fri., at 9..Associate Professor Latham.

6. **Shakespere (Six Plays).**

3 hrs.; Mon., Wed., Fri., at 10.....Associate Professor Macmillan.
(May be taken in two years.)

7. Poetry and the Drama from Dryden to Moore.
3 hrs.; Mon., Wed., Fri., at 11.....
Associate Professor Macmillan and an Assistant.
(Given in 1923-24; omitted 1924-25.)

8. Argumentation and Debating.
3 hrs.....Associate Professor Latham.
Asst. Professor ————and Assistant.

9. Poets of the Nineteenth Century.
3 hrs.; Mon., Wed., Fri., at 4.....Professor Lafleur and an Assistant.

10. English Novelists, from Defoe to George Eliot.
3 hrs.; Tu., Th., Sat., at 11.....Professor Lafleur.

11. The English Drama, 1590-1642.
3 hrs.; Mon., Wed., Fri., at 11.....Associate Professor Macmillan.
(Omitted 1923-24; given in 1924-25.)

12. Anglo-Saxon.
3 hrs., 1st term; Mon., Wed., Fri., at 2...Associate Professor Latham.
Text-Book:—Sweet, Anglo-Saxon Reader (all the prose).

13. Anglo-Saxon Poetry and Introduction to English Philology.
3 hrs., 2nd term; Mon., Wed., Fri., at 2..Associate Professor Latham.
Text-Book:—Sweet, Anglo-Saxon Reader (all the verse).
Prerequisite:—13.

14. Chaucer.
3 hrs., 1st term; Mon., Wed., Fri., at 9..Associate Professor Latham.
(Omitted in 1923-24.)

15. American and Canadian Literature.
3 hrs., 2nd term; Mon., Wed., Fri., at 9.....
Associate Professors Macmillan and Latham.

16. Comparative Literature.
(The influence of English literature upon the continent of Europe, chiefly during the 18th and 19th centuries.)
3 hrs.; Tu., Th., Sat., at 10.....Professor Lafleur.

17. Comparative Literature.
(The literary relations between England and the continent of Europe, through the works of leading French, German, Spanish and Italian writers, beginning with Montaigne.)
3 hrs.; Tu., Th., Sat., at 10.....Professor Lafleur.

18. The English Bible.
3 hrs., 1st term; Tu., Th., Sat., at 9.....
Professor Gordon and Associate Professor Macmillan.
(Omitted in 1923-24.)

HONOUR COURSE.

Second Year:—4, and one course selected from 6, 16, 18.
Third Year:—Four courses, including 13.
Fourth Year:—Four courses not taken in the Third Year, including 14.

ENGLISH REQUIREMENTS FOR THE HONOUR COURSES IN ENGLISH AND LATIN, ENGLISH AND FRENCH, AND ENGLISH AND GERMAN.

Second Year:—Consult the Head of the Department.
Third Year:—Any courses aggregating six hours a week, including 13, chosen from 5 to 18.
Fourth Year:—Any courses aggregating six hours a week chosen from 5 to 18, not taken in the Third Year.

ENGLISH REQUIREMENTS FOR THE HONOUR COURSES IN ENGLISH AND OTHER SUBJECTS.

Second Year:—Consult the Head of the Department.
Third Year:—Courses aggregating six hours chosen from 5 to 18.
Fourth Year:—Any courses aggregating six hours chosen from 5 to 18, not taken in the Third Year.

GRADUATE COURSES.

See page 409.

DEPARTMENT OF GEOLOGY AND MINERALOGY.

PROFESSORS:—{FRANK D. ADAMS. J. AUSTEN BANCROFT.

ASSOCIATE PROFESSOR OF MINERALOGY:—R. P. D. GRAHAM.

ASSISTANT PROFESSOR OF GEOLOGY:—JOHN J. O'NEIL.

LEROY FELLOW IN GEOLOGY:—.....

SESSIONAL LECTURER:—JOHN A. DRESSER.

SESSIONAL LECTURER IN PALÆONTOLOGY:—TO BE APPOINTED.

1. **General Geology.** (Applied Science 141, in part).
3 hrs.; Mon., Wed., Fri., at 9..... Professors Adams and Bancroft.
Excursions on Saturday mornings for five or six weeks after term opens. On their discontinuance, 1 hr. lab. Students taking this course will be excused from any classes which conflict with the excursions.
Text-Book:—Cleland, Geology, Physical and Historical.

2. **Physiography.**
2 hrs.; Wed., Fri., at 12.....Professor Bancroft.
Prerequisite:—1.

3. **Historical Geology (Advanced).** (Applied Science 152.)
1 hr.; Mon., at 12, and 1 lab. period in 2nd term on Mon., 2 to 4.
Prerequisite:—1.

4. **Canadian Geology.** (Applied Science 149.)
1 hr., 1st term; Wed., at 11.....Professor Bancroft.

5. **Mineralogy.** (Applied Science 142.)
2 hrs., Tues. and Thurs., at 9.....Associate Professor Graham.

6. **Determinative Mineralogy.** (Applied Science 143).
2 lab. periods of 3 hrs. each during the first term.
Associate Professor Graham.

7. **Economic Geology.** (Applied Science 148.)
1 hr.; 1st term; Thurs., at 11.....Professor Bancroft.

8. **Ore Deposits.** (Applied Science 148.)
4 hrs.; 2nd term.....Professor Adams.

9. **Optical Mineralogy and Crystallography.**
2 lab. periods, 1st term.
Hours to be arranged.....Associate Professor Graham.

10. **Petrography.** (Applied Science 147.)
1 hr.; 1st term; 1 lab. (3 hrs.) sess.....
Professor Bancroft and Associate Professor Graham.

11. **Advanced Petrography.**
Laboratory work—all hours to be arranged.....Professor Bancroft.

12. **Palæontology.**
2 hrs.; 3 hrs. lab. All hours to be arranged.

13. **Geological Colloquium.**
One hour per week (to be arranged).....
Professors Adams, Bancroft and Associate Professor Graham.

HONOUR COURSE.

Second Year:—Geology 1, 5 and 6, Zoology 1, Botany 2, Chemistry 1, English 4.
Third Year:—Geology 2, 3, 4, 9, 10, Chemistry 3.
Fourth Year:—Geology 7, 8, 11, 12, 13, Botany 4 and Zoology 7.

GRADUATE COURSES.

See page 432.

DEPARTMENT OF GERMANIC LANGUAGES.

PROFESSOR:—H. WALTER.
ASSISTANT PROFESSOR:—E. T. LAMBERT.
LECTURER:—MISS B. MEYER.

1. **German Language.** (Beginners' B.A. Course.)

3 hrs.; Tu., Th., Sat., at 9, or Mon., Wed., Fri., at 4.
Prof. Walter, Asst. Prof. Lambert, Miss Meyer.

Texts:—Van der Smissen und Fraser, High School German Grammar (Copp, Clark Co.); Guerber, Märchen und Erzählungen, Vol. I (Heath); Nichols, Easy German Reader (Holt).

Students intending to proceed to course 5 will be required to take a supplementary examination in September (for which no fee will be charged) covering the rest of the grammar and the following texts:—Riehl, Die vierzehn Nothelfer (A.B.Co.); Moser, Der Bibliothekar (Heath); Schrakamp, Ernstes und Heiteres (A.B.Co.); Horning, German Composition. Arrangements will be made by which students will be enabled to do this work by correspondence. This examination will take place at the time of the regular supplemental examinations.

2. **German Language.**

3 hrs.; Tu., Th., Sat., at 9.....Miss Meyer.

Texts:—Van der Smissen und Fraser, High School German Grammar (Copp, Clark Co.); Freytag, Die Journalisten (Ginn); Fulda, Talisman (Holt); Collmann, Easy German Poetry (Ginn, Ed. 1913); Horning, German Composition.

Private Readings:
Baumbach, Waldnovellen (Heath); Riehl, Burg Neideck (Am. B. Co.).

3. **German.** (Beginners' B.Sc. Course.)
3 hrs.; Tu., Th., Sat., at 10.....Assistant Professor Lambert.
Texts:—Sheldon's Short German Grammar (Heath); Guerber's Märchen und Erzählungen, Vol. I (Heath); Gore's German Science Reader (Heath).

4. **German Science Reading Course.** Second Year.
3 hrs.; Mon., Wed., Fri., at 5.....Assistant Professor Lambert.
A course in reading Science German is given for students who have matriculated in this language or have taken it in the First Year.
Text:—Gore's German Science Reader (Heath).

5. **German Language.** Second Year.
3 hrs.; Mon., Wed., Fri., at 11 .....
Texts:—Horning's German Composition (Copp, Clark Co.); Schiller, Wilhelm Tell (Holt); Goethe, Egmont; Keller's Bilder aus der Deutschen Literatur (American Book Co., Ed. 1905).
Private Readings:
Baumbach, Der Schwiegersohn (Holt); Storm, Auf der Universität (Holt).

6. **German Language, Commerce Course.** Students will receive one hour's instruction in Commercial German and will take two hours in course 5.

7. **German Language.** Second Year. Honour Course.
3 hrs.; Mon., Wed., Fri., at 12.....
Texts:—Wiehr, German Composition (Oxford); Lessing, Minna von Barnhelm; Goethe, Hermann und Dorothea (Ginn); Schiller, Historische Skizzen (Clarendon Press).
Private Readings:
Heine, Harzreise, Goethe, Sesenheim (Holt).

N.B.—In order to be admitted to the following courses a student must know German well enough to take lectures delivered in German and express himself in German with some degree of fluency and correctness.

8. **German Literature (Nineteenth Century).**
3 hrs.; Mon., Wed., Fri. (given in 1924-25).....Professor Walter.
Texts:—Kleist, Prinz Friedrich von Homburg (Ginn); Grillparzer Sappho (Ginn); Hebbel, Agnes Bernauer; Heine, Prose (Oxford Univ. Press); Heine, Verse; Hauptmann, Die versunkene Glocke; Keller, Sieben Legenden; History of Literature, Nineteenth Century (Kluge).
Prose Composition.

9. German Literature (Eighteenth Century).
3 hrs.; Mon., Wed., Fri. (given in 1923-24).....Professor Walter.

Texts:—Lessing, Emilia Galotti (Ginn); Lessing, Nathan (A.B.Co.); Goethe, Iphigenie (Pitt Press); Schiller, Wallenstein's Tod; Collins, Selections from German Classics (Oxford Univ. Press); Kluge, Geschichte der deutschen Literatur. Prose Composition.

10. Mediæval German Literature and Philology. Honour Course.
1 hr.; Mon., Wed., at 4.....

Texts:—Bachmann, Mittelhochdeutsches Lesebuch (Fæsi und Beer, Zurich); Behaghel; Die Deutsche Sprache (Freytag, Leipzig).

HONOUR COURSE.

11. Entwicklung der deutschen Lyrik.....Professor Walter.
1 hr. Given in 1924-25.

12. Geschichte des deutschen Trauerspiels.....Professor Walter.
1 hr. Given in 1923-24.

13. Composition.
1 hr.

The German language alone is used in class instruction in courses 2–12, and, in order to obtain honours, candidates must be able to speak German fluently.

14. Gothic and Introduction to Germanic Philology.
1 hr.....Professor Latham.

15. German Reading Course. Intended mainly for Honour students in other Departments. No preliminary knowledge of German is required.
Professor Walter.

GRADUATE COURSES.

See page 412.

DEPARTMENT OF HISTORY.

PROFESSORS:—{BASIL WILLIAMS. C. E. FRYER.

ASSOCIATE PROFESSOR:—W. T. WAUGH.
READER:—T. W. L. MACDERMOT.

COURSES FOR ORDINARY STUDENTS.

1. **General History from Origins to the Break-up of the Roman Empire.** First Year.
3 hrs.; Tu., Th., Sat., at 11.....Associate Professor Waugh.

2. **British and European History, 45—1603 A.D.** Second Year.
3 hrs.; Mon., Wed., Fri., at 9.....Professor Fryer.

3. **British and European History, 1603 to the Present Day.** Third Year.
3 hrs.; Mon., Wed., Fri., at 4.....Mr. MacDermot.

4. **History of Canada and the United States.** Fourth Year.
3 hrs.; Mon., Wed., Fri., at 11.....Professors Williams and Fryer.

COURSES FOR HONOUR STUDENTS.

Prerequisite:—History 1.

Second Year:

5. **Mediæval and Renaissance History.**
3 hrs.; Tu., Th., Sat., at 9.....Professor Waugh.
History 2; Economics 2; approved courses in French or German and in Latin or German.

Third Year:

6. **English Constitutional History.**
3 hrs.; Tu., Th., Sat., at 10.....Professor Waugh.

7. **European History, 1603-1784.**
3 hrs.; Mon., Wed., Fri., at 12.....Professor Williams.
An approved course in Economics, Latin, French or German and one of the special subjects named below.

Fourth Year:

8. **European History, 1784 to the present day.**
3 hrs.; Tu., Th., Sat., at 9.....Professor Fryer.

9. **European Colonization and Expansion.**
3 hrs., Mon., Wed., Fri., at 10.....Professor Williams.
History 4 and 9 and continuation of special subject chosen in the Third Year.

Special Subjects:—
The Age of Chaucer and Wycliffe.
The Treaty of Vienna.
The Anglo-French Entente of 1904.
Roman Law.
A Period or Aspect of Ancient History.
Federal Constitutions in the British Empire.

NOTE.—A choice of one of these Special Subjects for continuous study by Honour students during their Third and Fourth Years will be made in consultation with the Head of the Department.

HONOUR COURSE IN HISTORY AND ANOTHER SUBJECT.

History Courses:—
Second Year: 2 and 5.
Third Year: 6 and 7.
Fourth Year: 8 and 9. 4 may be taken instead of one of these courses.

NOTE.—In addition to the examinations on the subjects taken up in the last year, Fourth Year Honour students will have a general examination paper on the History studied by them in their four years.

GRADUATE COURSE.

See page 413.

Further particulars of these courses and text-books recommended will be found in the Separate Bulletin issued by the History Department.

DEPARTMENT OF MATHEMATICS.

PROFESSOR:—J. HARKNESS.
ASSOCIATE PROFESSOR:—A. H. S. GILLSON.
ASSISTANT PROFESSOR:—T. H. MATTHEWS.

1. **Ordinary Mathematics.**
   (a) Algebra:—2 hrs., 2nd term.....Assistant Professor Matthews.
   (b) Geometry:—1 hr., 1st term.....Assistant Professor Matthews.
   (c) Trigonometry:—2 hrs., 1st term; 1 hr., 2nd term.....
   Associate Professor Gillson.

Text-books:—Hall and Knight, Elementary Trigonometry; Carslaw, Plane Trigonometry; Hall and Stevens, School Geometry, Parts I-VI; Hall and Knight, Elementary Algebra; Bottomley, Logarithmic Tables.

2. **Advanced Ordinary Mathematics.**
   (a) Advanced Algebra and Theory of Equations:—1 hr., 1st term; 2 hrs., 2nd term.....Professor Harkness.
   (b) Geometry and Trigonometry and Modern Plane Geometry:—2 hrs., 1st term; 1 hr., 2nd term....Assistant Professor Matthews.

Text-books:—Hall and Knight, Higher Algebra; Fine, College Algebra; Carslaw, Plane Trigonometry; Godfrey and Siddons, Modern Geometry.

3. **Solid Geometry and Geometrical Conic Sections and Algebra.**
   (a) Solid Geometry and Geometrical Conic Sections:—3 hrs., 1st term.
   Assistant Professor Matthews.
   (b) Algebra:—3 hrs., 2nd term.

Text-book:—Hall and Knight, Higher Algebra.

4. **Analytical Geometry and Infinitesimal Calculus.**
   (a) Analytical Geometry:—2 hrs., 1st term; 1 hr., 2nd term.....
   Associate Professor Gillson.
   (b) Infinitesimal Calculus:—1 hr., 1st term; 2 hrs., 2nd term.....
   Professor Harkness.

Text-books:—C. Smith, Conic Sections; C. A. Scott, Cartesian Plane Geometry, Part I, Analytical Conics; Lamb, Infinitesimal Calculus; Osgood, Calculus.

5. **Spherical Trigonometry and Astronomy.**
   (a) Spherical Trigonometry; 1 hr., 2nd term.....
   Assistant Professor Matthews.
   (b) Astronomy:—2 hrs., 2nd term.....Associate Professor Gillson.

Text-books:—Murray, Spherical Trigonometry; Barlow and Bryan,

Astronomy (London University Tutorial Press); Moulton's Astronomy.

Note:—Spherical Trigonometry may be taken separately from Astronomy by students taking the double course in Arts and Applied Science.

6. Analytical Geometry and Calculus (for students in Chemistry).

3 hrs.....Assistant Professor Matthews.

Text-book:—Lamb's Infinitesimal Calculus.

7. Analytical Geometry of Three Dimensions; Curve Tracing.

(a) Analytical Geometry of Three Dimensions: 2 hrs.....
Professor Harkness.

(b) Curve Tracing; 1 hr.....Professor Harkness.

Text-books:—C. Smith's Solid Geometry; R. T. J. Bell, Geometry of Three Dimensions; Fine and Thompson, Co-ordinate Geometry.

8. Infinitesimal Calculus and Differential Equations.

(a) Infinitesimal Calculus; 2 hrs.....Professor Harkness.

(b) Differential Equations; 1 hr.....Associate Professor Gillson.

Text-books:—Lamb, Infinitesimal Calculus; Forsyth, Differential Equations (Macmillan); Piaggio, Differential Equations (Bell).

9. General Analysis.

3 hrs.....Professor Harkness.

Text-books:—Hardy, Course in Pure Mathematics (Camb. Univ. Press); Carslaw, Introduction to Fourier's Series and Integrals (Macmillan); Byerly, Fourier Series and Special Harmonics.

10. Theory of Functions and Higher Plane Curves.

(a) Theory of Functions of a Complex Variable; 2 hrs.....
Associate Professor Gillson.

(b) Introduction to Theory of Higher Plane Curves; 1 hr.....
Associate Professor Gillson.

Text-books:—Whittaker and Watson, Modern Analysis; Appell and Lacour, Fonctions Elliptiques (Gauthier-Villars).

Honour Course in Mathematics and Physics.

Prerequisites:—Mathematics 2 or high standing in 1; Physics 1 or 2.

Second Year:—Mathematics 3, 4, 5; Physics 3, 4. (Chemistry and English recommended as other subjects to be chosen.)

Third Year:—Mathematics 7, 8; Physics 5, 6.

Fourth Year:—Mathematics 9, 10; Physics 7, 8.

Graduate Courses in Mathematics.

See page 416.

DEPARTMENT OF MUSIC.

PROFESSOR:—H. C. PERRIN.

Prerequisites:

(a) Evidence of having passed at least the Intermediate Grade of the McGill Local Examinations in Pianoforte or Organ, or in the case of a vocalist or violinist, evidence of sufficient ability to play pianoforte accompaniments of moderate difficulty. In every case there will be an additional preliminary ear test and also a sight reading test at the keyboard.

(b) Evidence of having passed the Junior Grade of the McGill Local Examinations in Theoretical Music.

1. (a) Musical dictation and ear training, rhythm and sound studied separately and together (stimulation of musical perception); acquaintance with the compass and use of orchestral instruments.

1 hr.

(b) History of Music from 1650 to 1850, combined with analytical study of works by composers from Corelli and Scarlatti to Beethoven, embracing the suite, lied, rondo, sonata, overture, quartet, fugue, concerto.

2 hrs.

Text-books:—Scientific Basis of Music, Stone (No. 11, Novello's Music Primers); Musical Dictation, Parts I and II, Ritter (Nos. 29 and 30, Novello's Primers); Harmony and Ear Training, W. A. White (Silver, Burdett & Co.); Form in Music, Macpherson (Williams); History of Music, Baltzell (Theodore Presser & Co., Philadelphia); Studies in Phrasing and Form, Macpherson (Williams).

For Collateral Reading:—Studies of the Great Composers, Parry (Routledge); Beethoven and His Forerunners, D. G. Mason (Macmillan); Listener's Guide to Music, P. A. Scholes (Oxford University Press); How to Appreciate Music, Kobb (Sisley's Ltd.).

2. (a) Analytical Harmony in continuation of the previous year.

1 hr.

(b) History during the first part of the session, the early period, i.e., before 1650, and during the second part of the session, the period from the beginning of the 19th century to the present day.

1 hr.

(c) Study of composition (in continuation of (b) in previous year); comparison of styles; discussion of symphony, symphonic poem, dramatic music; discussion of principles of art and their application to music, especially as regards such points as unity, variety, contrast, proportion, symmetry and progress; the literature of music and literature on the subject of music.

Text-books:—Musical Dictation, Part II, Ritter (No. 30, Novello's Primers); Harmony and Ear Training, W. A. White (Silver, Burdett & Co.); Art of Listening to and Appreciation of Good Music, Dickinson (Scribner); Form in Music, Macpherson (Williams); History of Music, Baltzell (Theo. Presser & Co., Philadelphia); History of Music, Stanford-Forsyth (Macmillan).

For Collateral Reading:—Genesis of Art, Raymond; Philosophy of the Beautiful, Knight; Various Articles in Grove's Dictionary; Evolution of Harmony, Kitson (Clarendon Press); Sonata Form, No. 54, Novello's Primers; Art of Music, Parry; Naumann's History of Music; Threshold of Music, Wallace; From Grieg to Brahms, D. G. Mason (Macmillan); The Romantic Composers, D. G. Mason (Macmillan); Phases of Modern Music, L. Gilman (J. Lane).

DEPARTMENT OF ORIENTAL (SEMITIC) LANGUAGES.

PROFESSORS:— C. A. BRODIE BROCKWELL. A. R. GORDON.
ASSISTANT PROFESSOR:—G. ABBOTT-SMITH.
LECTURER:—W. C. GRAHAM.

1. **Hebrew Grammar, Composition, and Selected Biblical Texts.**
   3 hrs.; Mon., Wed., Fri., at 12.....Professor Brockwell.
2. **Hebrew Grammar, Syntax, and Selected Biblical Texts.**
   3 hrs.; Tu., Th., Sat., at 9....Professor Brockwell and Mr. Graham.
   Prerequisite:—1.
3. **Literature of the Jewish Hellenists:** Poetic (Greek) Texts.
   3 hrs.; Mon., Wed., Fri., at 2;....Assistant Professor Abbott-Smith.
   Prerequisite:—Greek 2.
4. **Grammar and Syntax of Jewish Hellenistic Texts.**
   1 hr.; Tu., at 12.....Assistant Professor Abbott-Smith.
   Prerequisite:—Greek 2.
5. **The Critical Value of Hellenistic Translation Texts.**
   1 hr.; Wed., at 2.....Assistant Professor Abbott-Smith.
   Prerequisite:—Greek 2.
6. **Literature of the Jewish Hellenists:** Poetic (Hebrew) texts.
   1 hr.; Mon., at 3.....Professor Gordon.
   Prerequisite:—1.
7. **Hebrew Texts.**
   3 hrs.; Mon., Wed., Fri., at 9....Professors Brockwell and Gordon.
   Prerequisite:—1.
8. **Arabic, and either Aramaic or Syriac, or Phoenician, or Ethiopic, or Transliterated Assyrian Texts.**
   3 hrs.; Mon., Wed., Fri., at 10. Professor Brockwell and Mr. Graham.

9. **Hebrew and Semitic Social Customs, Codes, and Institutions.**
3 hrs.; Mon., Wed., Fri., at 11.....Professor Brockwell.
10. **Hebrew History to the Age of the Mishnah.**
1 hr.; Fri., at 3.....Professor Gordon.
11. **Semitic Epigraphy, Including the History of the Alphabet.**
1 hr.; Tu., at 12.....Professor Brockwell.
12. **Hebrew Grammar, Syntax and Composition.**
1 hr.; Th., at 12.....Professor Brockwell.
13. **Semitic Comparative Philology.**
1 hr.; Tu., at 11.....Professor Brockwell.

HONOUR COURSE.

Prerequisite:—Hebrew 1.
Second Year:—Consult the Head of the Department.
Third Year:—7, 8, 9, 10 (*or* 5), 11 and 12.
Fourth Year:—7, 8, 9, 5 (*or* 6 *or* 10) 11 and 13.

COURSES FOR THE M.A. AND PH.D. DEGREES.

See page 408.

DEPARTMENT OF PHILOSOPHY.

PROFESSOR:—W. CALDWELL.

ASSOCIATE PROFESSOR OF LOGIC AND METAPHYSICS:—
J. W. A. HICKSON.

ASSOCIATE PROFESSOR OF PSYCHOLOGY, AND DIRECTOR OF THE PSYCHOLOGICAL LABORATORY:—WILLIAM D. TAIT.

LECTURER:—HARRY R. DESILVA, M.A.

For Undergraduates.

1. **Introduction to Psychology.**
Lectures, class experiments and exercises.
3 hrs., Mon., Wed., Fri., at 10.....Associate Professor Tait
Text-book:—Warren: Elements of Human Psychology.

2. **Logic and Introduction to Philosophy.**
3 hrs., Tu., Th., Sat., at 10.....Associate Professor Hickson.
Text-books:—Sellar, Essentials of Logic; and Essentials of Philosophy. (Portions.)

3. **Moral Philosophy.**
3 hrs., Mon., Wed., Fri., at 12.....Professor Caldwell.

4. Greek Philosophy.
3 hrs. (one term).....Professor Caldwell.

5. History of Modern Philosophy.
3 hrs., Mon., Wed., Fri., at 4.
1st term: From the Renaissance to Kant.
2nd term: From Kant to the year 1900.
Professor Caldwell and Associate Professor Hickson.
Text-book:—Höffding, History of Modern Philsophy.

6. Experimental Human Psychology, Experiments and Discussions—Introductory Laboratory Course.
3 hrs.....Mr. DeSilva.

For Undergraduates and Graduates.

7. Theory of Scientific Method.
3 hrs., Mon., Wed., Fri., at 12.....Associate Professor Hickson.

8. Advanced Moral Philosophy.
3 hrs.....Professor Caldwell.

9. Theory of Knowledge and Metaphysics.
3 hrs.....Associate Professor Hickson.

10. Main Currents of Recent Philosophy.
3 hrs.....Associate Professor Hickson.
It is advisable to take Course 5 with this, if it has not been taken previously.

11. Philosophy of Religion.
Lectures, Readings and Discussions.
3 hrs (one term).....Professor Caldwell.

12. The Critical Philosophy of Kant.
Lectures, Readings and Papers.
3 hrs.....Professor Caldwell or Associate Professor Hickson.

13. Social Psychology.
Lectures, prescribed readings and reports.
3 hrs., Tu., Th., Sat., at 10.....Mr. DeSilva.

14. Educational Psychology.
Lectures, prescribed readings and reports.
3 hrs., Mon., Wed., Fri., at 9.....Associate Professor Tait.

15. Advanced Psychology.
Lectures, prescribed reading and a thesis.
3 hrs., Tu., Th., Sat., at 9. Given in 1924-25. Associate Professor Tait.

16. Abnormal Psychology.
As in Fourth Year Medicine. . Associate Professor Tait and Mr. DeSilva.

HONOUR COURSE.

Second Year:—1 and 2.
Third Year:—Any four full courses from 4 to 16 inclusive.
Fourth Year:—Any four full courses from 4 to 16 other than those already selected. In addition, a course in any of the following subjects:—Education, History, Economics, English Literature, Physics, Physiology, Zoology.

The Philosophy requirements for honours in Philosophy and English and Philosophy and German are six hours selected from 4 to 16 in each of the Third and Fourth Years.

GRADUATE COURSES FOR M.A. DEGREE.

See page 413.

DEPARTMENT OF PHYSICAL EDUCATION.

DIRECTOR:—ARTHUR S. LAMB, B.P.E., M.D.
UNIVERSITY MEDICAL OFFICER:—F. W. HARVEY, B.A., M.D.

All students on entering the University are required to pass a physical examination. They are then divided, according to the result of this examination, into five classes:—

(a) Fit for all forms of physical exercise.
(b) Fit for a limited number of forms.
(c) Fit for gymnasium work only.
(d) Fit for remedial gymnastics or temporarily unfit.
(e) Unfit for any form of physical exercise.

At the time of his medical examination each student is required to fill in a card indicating his choice of physical activity, which he will be allowed to follow, unless debarred for medical reasons, under which circumstances he will be given a further choice among other recognized, but less strenuous, forms of exercise or will do gymnasium work as the case may require.

Physical education is compulsory for all students of the first two years. Two periods per week will be devoted to it.

Unexcused absences up to one-eighth of the required number of periods shall be allowed. Unexcused absences exceeding one-eighth, but not exceeding one-fourth, may be allowed if at the end of the session the student passes a special examination and satisfies the Director that he has made sufficient progress. Unexcused absences exceeding one-fourth shall disqualify a student. Such students shall be required to take extra gymnasium class work to the satisfaction of the Director, a supplemental course being given in the month of September for this purpose.

At regular intervals during each session and also at the end of each session, the Director of Physical Education shall furnish the Dean of each Faculty with a list of students who have failed to meet the attendance requirements as laid down in the ordinary curriculum, or who have proved unsatisfactory in other respects, and such cases shall be dealt with by the respective Faculties.

No student in default shall be allowed to proceed to the next year of his course unless for special reasons exemption should be granted on the recommendation of his Faculty and approved by the Committee on Physical Education.

Not less than one month before the conferring of degrees in each session the Director shall furnish to the Registrar of the University, for transmission to Corporation and the Faculties concerned, a list of all students, being candidates for degrees at the forthcoming Convocation, who have failed to satisfy the requirements of the Committee on Physical Education, and no Diploma for a degree shall be issued to any such candidate unless by the express direction of Corporation.

DEPARTMENT OF PHYSICS.

DIRECTOR:—A. S. EVE.

PROFESSOR:—L. V. KING.

ASSOCIATE PROFESSORS:—J. A. GRAY. A. N. SHAW.

ASSISTANT PROFESSORS:—H. E. REILLEY. D. A. KEYS. E. S. BIELER.

DEMONSTRATORS:—V. HENRY. R. J. CLARK. L. A. SMITH. W. C. QUAYLE. M. CROWE. M. CAM. A. V. DOUGLAS.

1. General Course. (Applied Science 44, Lab. 45.)

3 hrs., Wed. and Fri., at 2; lab., Mon., 2-4.....Professor Eve.
Text-Books:—Kimball's College Physics (Holt); Laboratory Manuscripts (Renouf Publishing Co.).

1M. Physics for Medical and Dental Students.

2 hrs., Tu., Th., at 3; 2 hrs. lab., Tu. 4-6;
Assistant Professor H. E. Reilley.
Text-Books:—Duff's Text-book of Physics (Blakiston); Laboratory Manuscripts (Renouf Publishing Co.). *Reference Books:*—Daniell's Text-book of Medical Physics (Macmillan); Jones, Electricity and Magnetism (Lewis)

2. Heat, Sound and Light. (Applied Science 311, Lab. 312.)

3 hrs., Tu., Th., Sat., at 11; 2 hrs. lab., Mon., Wed., or Fri., 11-1....
Associate Professor Shaw.
Text-Books:—Duncan and Starling's Heat, Light and Sound (Macmillan); Laboratory Manuscripts (Renouf Publishing Co.).

3A. Electricity and Magnetism. (Applied Science, 315, Lab. 316.)

2 hrs., Mon., Fri., at 11; 2 hrs. lab., Tu. or Th., 2-4.....
Associate Professor Gray.

Text-Books:—Duncan and Starling's Electricity and Magnetism (Macmillan); Laboratory Manuscripts (Renouf Publishing Co.).

3B. Statics and Hydrostatics.

1 hr., Wed., at 11.....Professor Eve.
Text-Book:—Loney's Statics and Dynamics (C.U.P.).

4. Dynamics.

2 hrs., 1st term; 1 hr., 2nd term. (A half course combined with Math. 5 to form a three hour unit), Tu., Th., Sat., at 9.
Professor Eve.
Text-Book:—Loney's Statics and Dynamics (C.U.P.).

5A. Properties of Matter.

1 hr., Sat., at 10. (also lab. 3 hrs.).....Assistant Professor Keys.
Text-Book:—Poynting and Thomson's Properties of Matter (Griffin).

5B. Statics, Dynamics of a Particle and Rigid Dynamics.

2 hrs., Tu., Th., at 10.....Professor King.
Text-Books:—Lamb's Statics and Lamb's Dynamics (C.U.P.).

6A. Electrical Measurements. (Applied Science 320, Lab. 321.)
2 hrs., Wed., Fri., at 9; 4 hrs. lab.; Wed., 2-6.....Professor King.
Text-Book:—Law's Electrical Measurements (McGraw-Hill).

6B. Light. (Replaced by 8B in alternate sessions.*)
1 hr., Mon., at 9. (also 3 hrs. lab.).....Associate Professor Gray.
Text-Books:—Edser's Light (Macmillan); Wood's Physical Optics (Macmillan).

7A. Electromagnetic Theory.
1 hr., Th., at 11.....Associate Professor Gray.
Text-Book:—Sir J. Thomson's Elements of Electricity and Magnetism (C.U.P.).

7B. Mathematical Physics.
2 hrs., Tu., Sat., at 11.....Professor King.
Text-Book:—Houston's Introduction to Mathematical Physics (Longmans).

8A. Molecular Physics.
2 hrs., Wed., Fri., at 9.....Associate Professor Shaw.
Text-Book:—Crowther's Ions, Electrons and Ionizing Radiation (E. Arnold).

8B. Theory of Heat. (Replaced by 6B in alternate sessions.*)
1 hr., Mon., at 9 (also lab., 3 hrs.).....Associate Professor Shaw.
Text-Book:—Preston's Theory of Heat (Macmillan).

9. Radioactivity.
2 hrs., 2nd term (also lab., 3 hrs.).....Professor Eve.
Text-Book:—Rutherford's Radioactive Transformations (C.U.P.).

10. Vector Analysis.
2 hrs., 1st term.....Professor Eve.
Text-Book:—Coffin's Vector Analysis (Wiley).

11. Advanced Statics, Dynamics, Hydrodynamics and Sound.
2 hrs.....Professor King.
Text-Books:—Lamb's Higher Mechanics (C.U.P.); Bassett's Hydrodynamics and Sound (Deighton Bell).

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*Courses 6B and 8B will be given in alternate sessions as follows:—6B in '24-'25, '26-'27, etc., and 8B in '23-24, '25-'26, etc.

12. Kinetic Theory of Matter, and Election Theory.

2 hrs.....Professor King.
Text-Books:—Jeans' Dynamical Theory of Gases (C.U.P.) and Richardson's Electron Theory of Matter (C.U.P.).

13. Quantum Theory and Relativity.

1 hr.....Professor Eve.

14. Advanced Electricity and Magnetism.

2 hrs.....Professor King.
Text-Book:—Jeans' Electricity and Magnetism (C.U.P.).

15. Laboratory Practice and Physical Manipulation.

1 hr. (also 2 hrs. lab.). Assistant Professor Keys and Mr. H. T. Pye.

A course of practical instruction on the use of tools (including the lathe), glassblowing, photography and the construction of simple apparatus. This course is designed as an aid and introduction to original research.

16. Thermodynamics.

1 hr.....Associate Professor Shaw.
(Alternate sessions, '24-'25, '26-'27, etc.)

17. Atomic Theories.

1 hr.....Associate Professor Gray.

HONOUR COURSE IN MATHEMATICS AND PHYSICS.

Prerequisites:—Mathematics 2; Physics 1 or 2.
Second Year:—Mathematics 3, 4, 5*; Physics 3, 4,*; (Chemistry and English recommended as other subjects to be chosen.)
Third Year:—Mathematics 7, 8; Physics 5, 6.
Fourth Year:—Mathematics 9, 10; Physics 7, 8.

GRADUATE COURSE IN PHYSICS.

See page 417.

*Mathematics 5 and Physics 4 are half-courses.

DEPARTMENT OF ROMANCE LANGUAGES.

ASSOCIATE PROFESSOR:—R. DU ROURE.

ASSISTANT PROFESSORS:—P. VILLARD. MLLE. L. TOUREN.

FRENCH.

Owing to the position which this University occupies in the midst of a very large French speaking population, the Department enjoys the opportunities afforded by French church services, French newspapers, French theatres, French literary clubs and public lecture courses in the French language. It maintains in consequence a particularly high standard in the study of French. Every lecture, even in the First Year, is given in French, and the complete course of studies is so combined as to give the students not only a theoretical knowledge of French grammar and literature, but a practical ability to talk, read and write French correctly and fluently.

Both oral and written examinations are held on each year's work. The oral examination (in both ordinary and honour courses) counts for 50%.

1. **French Language.** First Year.
   3 hrs., Section A, Mon., Wed., Fri., at 9. Section B, Mon., Wed., Fri., at 11.
   Associate Professor du Roure, Assistant Professors Villard and Touren.

Texts:—Bouvet, French Syntax and Composition (Heath); Lavisse, Histoire de France, Cours moyen; Fabliaux et Contes du Moyen Age (Heath). (a) Ordinary Course.—Hugo, Gavroche (Oxford); Maupassant, Huit Contes choisis (Heath); Meilhac et Halévy, L'été de la Saint Martin (Heath); Malot, Sans Famille (Heath); Poésies choisies. (b) Advanced Course.—Daudet, Lettres de mon moulin (Oxford); Racine, Andromaque (Ginn); Mérimée, Contes et Nouvelles (Oxford); Bowen, Modern French Lyrics (Heath); Corneille, Le Cid.

2. **French Language.** Second Year.
   3 hrs., Tu., Th., Sat., at 9.
   Assistant Professors Villard and Touren.

Texts:—Corneille, Horace (Oxford University Press); Racine, Britannicus (Holt); Molière, Les précieuses ridicules (Heath); Vigny, Servitude et grandeur militaires (Oxford); Mansion, Littérature française; Pailleron, Le Monde où l'on s'ennuie; Louis Hemon, Maria Chapdelaine (Grassat); Cameron, French Composition (Holt).

3. **French Language.** Second Year. (Honour Course.)
   3 hrs., Tu., Th., Sat., at 11.....

Texts:—Seventeenth Century French Readings (Holt); Molière, Les Femmes savantes; Voltaire, Zadig (Macmillan); Musset, Trois Comédies (Heath); Hugo, Ruy Blas; La Fontaine, Extraits (Hattier); Doumic, Histoire de la littérature française.

Private Readings:—Pailleron, Le Monde où l'on s'ennuie (Heath); Hugo, Notre-Dame de Paris (Ginn).

4. French Literature:—General Course to the end of the Seventeenth Century. Third and Fourth Years.

(Given in 1924-25)

3 hrs., Mon., Wed., Fri., at 10.....

Associate Professor du Roure and Assistant Professor Touren.

Texts:—Oxford Book of French Verse; Darmsteter, Morceaux Choisis du XVI siecle (Delagrave); Montaigne, Selections (Heath); Rabelais, Selections (Macmillan); French Prose of the XVIIth Century (Heath); Corneille, Polyeucte; Racine, Phèdre; Molière, Le Misanthrope; Mme. de la Fayette, Princesse de Clèves; Doumic, Histoire de la littérature française.

Prose Composition:—(a) Ordinary Course.—Spiers, Graduated Course of Translation into French Prose (Simpkin, Marshall & Co., London); (b) Honour Course.—Nicholson and Brennan, Passages for Translation into French and German (Oxford University Press).

5. French Literature:—General Course, Eighteenth and Nineteenth Centuries. Third and Fourth Years.

3 hrs., Mon., Wed., Fri., at 10.....

Associate Professor du Roure and Assistant Professor Touren.

Texts:—Lesage, Gil Blas (Heath); Marivaux, Le Jeu de l'amour et du hasard (Macmillan); Diderot, Selections (Heath); J. J. Rousseau, Selections; Voltaire, Prose Selections (Heath); Beaumarchais, Le Barbier de Séville (Ginn); Chateaubriand, René (Nelson); Flaubert, Trois Contes (Nelson); Hugo, Hernani; Balzac, Le Père Goriot; Sainte Beuve, Selections (Cambridge University Press); French Lyrics of the Nineteenth Century (Ginn); Doumic, Histoire de la littérature française.

Prose Composition:—(a) Ordinary Course.—Spiers, Graduated Course of Translation into French Prose (Simpkin, Marshall & Co., London); (b) Honour Course.—Nicholson and Brennan, Passages for Translation into French and German (Oxford University Press).

N.B.—In order to be admitted to courses 4 and 5 a student must know French well enough to take lectures delivered in French and express himself in French with some fluency and correctness.

6. Mediæval French Literature and Philology. Third and Fourth Years. (Honour Course.)

1 hr., Fri., at 10.....

Texts:—Darmsteter, Cours de Grammaire Historique, Parts I and II, and Bartsch, Chrestomathie de l'Ancien Français.

7. **History of the French Novel.** Third and Fourth Years.
(Honour Course.)
3 hrs., Tu., Th., Sat., at 10.....Associate Professor du Roure.
(Given in 1925-26.)

8. **History of the French Theatre.** Third and Fourth Years.
(Honour Course.)
2 hrs., Mon., at 10.....Associate Professor du Roure.
(Given in 1923-24.)

9. **Evolution of the French Lyric.** Third and Fourth Years.
(Honour Course.)
2 hrs., Mon., Wed., at 10.....Associate Professor du Roure.
(Given in 1924-25.)

10. **French Commercial Course.** Second Year.
3 hrs., Mon., Wed., Fri., at 10.....Assistant Professor Villard.

Texts:—Mansion, Histoire de la littérature française; Racine, Britannicus (Holt); Carroué, Manuel de Correspondance Commerciale; Daudet, Les Lettres de mon moulin (Oxford); Pailleron, Le Monde où l'on s'ennuie.

Home Reading: G. Sand, La Mare au diable; Vigny, Le Cachet rouge; Mérimée, Colomba.

11. **French Commercial Course.** Third Year.
3 hrs., Tu., Th., Sat., at 10.....Assistant Professor Villard.

Texts:—Janau, Commercial French Correspondence; Clerget, Manuel d'economie commerciale; Doumic, Histoire de la littérature française au 19eme siècle; V. Hugo, Ruy Blas (Heath); Flaubert, Trois Contes (Nelson); French Lyrics of the Nineteenth Century (Ginn).

Home reading: Chateaubriand, Atala; E. Auger, Le Genre de M. Poirier; Balzac, Eugenie Grandet.

12. **French Science Readings.** First Year, B.Sc. Course.
3 hrs.....Assistant Professor Villard.

Text:—Bowen, A First Scientific French Reader (Heath).

HONOUR COURSE.

Prerequisite:—1.
Second Year:—2 and 3.
Third and Fourth Years:—4, 6 and 8.

M.A. COURSE.

See page 411.

mcgill U. 1923-24

DEPARTMENT OF SOCIAL SCIENCE.

ASSISTANT PROFESSOR AND DIRECTOR OF THE SCHOOL FOR SOCIAL WORKERS:—CARL ADDINGTON DAWSON.

1. **Introduction to the Study of Society.** Second Year.
3 hours, Tu., Th., at 2, the third hour to be arranged.
Human nature, society and group; isolation and contact; the nature and effects of communication; social forces; competition and the location of the individual in the community; war, racial and cultural conflicts; social control; collective behaviour; social progress.

Text-book:—Park and Burgess, Introduction to the Science of Sociology.

2. **The Community.** Third and Fourth Years. A Study of Rural and Urban Life.
Tu., Th., and Sat., at 9.

Methods of studying the community; social anatomy; a comparative study of communities and their fundamental nature; analysis of the underlying forces of the social process which make for natural groups and institutions (to meet needs, industrial, leisure time, religious, educational, governmental, social agencies); disorganization and reorganization in modern communities; community culture.

3. **Immigration.** Third and Fourth Years.
Tu., Th. and Sat., at 10, 1st term.
Social, industrial and political phases of the immigration problem; types of migration and immigration; present sources for Canadian immigration; immigration laws and policies; assimilation and Canadianization.

4. **Social Pathology.** Third and Fourth Years.
Tu., Th., and Sat., at 10, 2nd term.
Dependency (including poverty); defectiveness; degeneracy; social variation; social unrest and disorder; pathology of play and amusements; crime, delinquency, the gang; family disorganization—desertion; tendencies in the direction of social reorganization. Supplemented by field trips, individual and group studies.

5. **Social Origins.** Third and Fourth Years.
To be given in 1924-25.
Study of early cultural development and social organization; comparative ethnological and anthropological materials; primitive mind; social attitudes; forms of control, etc.

6. Social Movements.—Collective behaviour.
To be given in 1924-25.
Natural history of labour, feminist, prohibition, country-life, farmer's, nationalistic, peace, religious, reform and other movements; classification of typical movements and the underlying laws of their development; function of social movements in respect to social change.

7. Delinquency and Crime and their Social Treatment. Fourth Year.
To be given in 1925-26.
An investigation of juvenile and adult delinquency from the point of view of human nature and social control. Temperamental and social elements as causation (as influence of home and neighbourhood); case studies of delinquent behaviour; reformatory institutions; probation, parole, honour system; police system; social treatment.

8. Social Research: Canadian Problems. Fourth Year.
Not given in 1923-24.
A research course.

9. Play and Social Utilization of Leisure Time. Third and Fourth Years.
Not given in 1923-24.
Work and leisure time; rhythm of rest days periodical; changes in industrial organization in respect to leisure time activities; commercialization of leisure; institutional organization of leisure as in Church, politics, "society," sport, and general culture.

Honour Course.

Students may take Social Science as a half honour course. The other half of the honour course can be taken in Economics or Political Science; in Philosophy or its sections; and in English. The selection of courses will be under the supervision of the Heads of the Departments or the sections joining them for honour course.

DEPARTMENT OF ZOOLOGY.

PROFESSOR:—ARTHUR WILLEY.
ASSISTANT PROFESSOR:—J. STAFFORD.
LECTURER:—JEAN T. HENDERSON.

Comparative Anatomy.
As in First Year Medicine.
* * * * * * *

1. **Elementary Zoology.**
3 hrs., 1st term; Mon., Wed., and Fri., at 11.....Professor Willey.
4 hrs. lab., Wed. and Fri., at 2.

2. **Zoology of Invertebrata.***
2 hrs., Wed., Fri., at 4.....Assistant Professor Stafford.
4 hrs. lab.; Wed., Fri., at 2.

3. **Historical Zoology.**
1 hr., Fri., at 5.....Professor Willey.

4. **Zoology of Vertebrata.**
2 hrs., Mon., Fri., at 10.....Professor Willey.
3 hrs. lab., Th., at 2.

5. **Comparative Embryology.**
2 hrs., 2nd term; Mon., Wed., at 11.....Professor Willey.
3 hrs. lab., Wed., at 2.

6. **General Zoology.**
2 hrs. lecture and 3 hrs. laboratory.

7. **Ethnology.**
1 hr., Tu., at 10.

HONOUR COURSE IN BIOLOGY.

Prerequisites:—Botany 2, Chemistry 1, Zoology 1.
Second Year:—Botany 3 and 4 (with laboratory work); Zoology 2, with at least Physics 1, or Chemistry 2 or their equivalent.
Third Year:—Botany 5 and 6; Zoology 3 and 6.
Fourth Year:—Botany 7 and 8; Zoology 4 and 5.

*This is a prerequisite for students who may hereafter wish to undertake zoological work at the Marine Laboratories under the Biological Board of Canada.

THE ROYAL VICTORIA COLLEGE.

Founded and Endowed by the late Rt. Hon. Baron Strathcona and Mount Royal.

FOUNDATION AND HISTORY.

The College was opened September 4th, 1899.

It is the outgrowth of plans conceived during the early years of his Principalship by the late Sir William Dawson, which resulted in the establishment of the Ladies' Educational Association. Under the auspices of the Association, courses of lectures, delivered chiefly by Professors of McGill University, were offered to women from 1870 until 1884, thus placing within their reach, to some extent at least, the advantages of a Collegiate and University education.

In 1884, during the principalship of the late Sir William Dawson, the late Lord Strathcona, then Mr. Donald A. Smith, gave a sum of $50,000, and, in 1887, a further sum of $70,000, to found the Donalda Endowment for the higher education of women, such education to be conducted in the buildings of McGill College, as a distinct course in the Faculty of Arts, with the understanding that as soon as practicable the classes were to be created into a separate college of McGill University, with a building separate from that of McGill College. Under the terms of the Donalda Endowment it was provided that degrees in the Faculty of Arts should be granted to women practically on the same conditions as to men, and that the examinations for such degrees for classing, honours, prizes and medals should be identical with those for men.

As a result of this generous gift and in accordance with the conditions attached, courses of instruction, identical in subject and in standard with those of the Faculty of Arts, were established for women in 1884. These courses were given in the Arts Building, some of the work of the Third and Fourth Years and of the Honour Courses being conducted in joint classes.

The first graduating class of eight women was presented for the degree of Bachelor of Arts in 1888.

The ultimate object of Lord Strathcona had been the provision of a residential college, and this was realized when the Royal Victoria College was opened in 1899, and formally inaugurated by their Majesties the King and Queen (then Duke and Duchess of York) in 1901.

A Warden and Resident Staff were appointed. With these new and great advantages the instruction provided by the original endowment has been maintained as hitherto, except that the separate classes are held mainly in the College building. Women have continued to prepare for degrees in Arts, including pure science. Through the wisdom of Lord

Strathcona, provision was also made for the study of music. Since, however, the establishment of music as a separate department of the University in the Conservatorium of Music, independent instruction in music in the College has ceased, but it still maintains a resident lecturer in this subject, who is also Vice-Director of the Conservatorium. The interest of College students in music is thereby served and provided for. Women students resident in the Royal Victoria College may take degree courses in music at the Conservatorium.

Resident students of Music have the use of pianos in two practising rooms and at certain hours in other parts of the building.

Facilities for lawn tennis and for skating are provided. Subject to regulations, the students have the privilege of using the University grounds.

THE COLLEGE BUILDING.

The College building, surrounded by garden and tennis courts, was erected at a cost of about $400,000 at the head of Union Avenue, upon land adjacent to the University Campus. Its beautiful and dignified exterior was designed in consistency with a careful and generous internal provision of a comfortable and gracious place of study and dwelling for students and for staff.

The building provides an academic, administrative and recreational centre for resident and non-resident students. It is situated on Sherbrooke Street, in close proximity to the University buildings, and within easy reach of Mount Royal Park. The building is fire-proof, and much thought and artistic care have been given to furnishing and decoration.

On the ground floor are the offices of the Administration, including the rooms of the Warden and Secretary, the faculty room, the students' common room, a spacious dining hall, and three lecture rooms. On the first floor are other lecture rooms, the library, reading room, and a handsome assembly hall, which is used for convocation, Conservatorium concerts, and other University purposes. This hall is sometimes lent for purposes that are in harmony with the objects of the College. The gallery, which is reserved exclusively for the use of College students on such occasions, affords the latter many opportunities of educational value. The second and third floors and a small part of the first floor are occupied by the rooms of the Resident Staff and students. Each student has a separate study-bedroom. The rooms are completely furnished, and no article of furniture need be brought by the students.

A large gymnasium is provided, fully equipped with modern requirements. In connection with the gymnasium are bath-rooms and dressing-rooms.

ADMISSION AND INSTRUCTION.

The College, being a college of McGill University, and its students being registered in the Faculty of Arts, they are required to comply with

the regulations concerning discipline and instruction, made by the University and Faculty, and, in addition, with such regulations as may be made for the Royal Victoria College.

Undergraduates are required to pass the Matriculation Examination of the University, or an equivalent examination (see page 53) and can proceed to the degrees of B.A. and B.Sc., under the regulations of the Faculty of Arts as stated on pages 122-136. They are required to wear academic dress. Partial students, in order to obtain admission, must pass the Matriculation Examination in the subject, or subjects which they wish to take, or, failing this, must be able to satisfy the Head of the Department concerned that they are qualified to proceed with the course.

Students are required to enter on the roll book of the College their names, home addresses, and addresses in Montreal. All students entering the University for the first time are required, according to municipal regulations, to present a certificate or other satisfactory evidence of successful vaccination. No student who has an infectious illness or who comes from a house in which there has been an infectious illness within a month, shall enter or return to the College without giving notice and obtaining the consent of the Warden. The health of the resident students is in charge of two physicians (Dr. W. F. Hamilton and Dr. C. F. Martin), who may be consulted, free of charge, by arrangement with the Warden. Every student applying for admission to residence is required to fill in an entrance form and to forward a medical certificate on a form provided by the College.

Instruction is given by professors and lecturers of the University and lecturers and tutors of the Royal Victoria College, who are also members of the various teaching departments of the Faculty of Arts. Graduate students can proceed to the degree of M.A., M.Sc. and Ph.D.

Lectures are given in the College or in the University buildings, practical instruction in science being given in the University laboratories. Students are assisted in their studies by the resident staff.

Students of the College have the use of the University Library, containing 180,600 volumes. There is also a College Library comprising works of general literature and the chief stated books required for the University curricula, the Department of Romance Languages being especially well represented. The College Library and Reading Room are open to resident students from 9 a.m. to 11 p.m. and to non-resident students from 9 a.m. to 6 p.m. (on Saturdays from 9 a.m. to 1 p.m.).

The Peter Redpath Museum, containing large collections in mineralogy, palæontology, zoology, botany, archæology, and ethnology, is open to students of the College.

The Warden's business hours are 10 a.m. to 1 p.m.; at other times, by special appointment. She will be glad to meet all students before the opening of the session and to discuss their plan of work then or at any other time during the session.

Applications for admission should be addressed to the Warden, Royal Victoria College, Montreal.

EXHIBITIONS AND SCHOLARSHIPS.

For a statement of the exhibitions and scholarships open to women students of the University, see pages 80-87.

In addition to these, and further to encourage residence within the College walls of students who might otherwise arrange to board in the city, the Warden and Staff are empowered to make nominations in any of the four college years to not more than three additional exhibitions of the value of $100.00 each.

TUITION FEES.

Students (graduate, undergraduate or partial, resident and non-resident) pay the same fees as are charged in the Faculty of Arts. For undergraduate students the fee is $100.00 (this includes fees for library, gymnasium and graduation). For further information, see page 102. Every student pays an Athletics or Grounds fee of $3.00, and undergraduate students, the Royal Victoria College Undergraduates Society fee of $2.50. All fees are payable to the Bursar, McGill University, on October 3rd and 4th.

BOARD AND RESIDENCE.

Residence in the College is open to graduate students, undergraduates, conditioned undergraduates, and, in exceptional circumstances, to partial students. *Application for residence should be made early as accommodation in the college is limited.* The charge for board and residence, in addition to the sessional fee for tuition, is $500.00 ($200.00 for room, $300.00 for board). This may be paid in two equal instalments of $250.00 each, in October and February. Room rent includes all expenses of heat and light (not other electrical attachments, for which fees will be charged). These charges cover the University session from September 27th to the close of the examinations (for members of the graduating class to May 31st).

Students entering earlier or remaining later for purposes of instruction, practice teaching, or examination, and students arriving in September for practice teaching, supplemental or matriculation examinations, are charged an additional fee of $1.50 a day. No additional fee is charged to students returning earlier than September 27th, for scholarship examinations. With the permission of the Warden, students may remain in residence during the Christmas vacation. They will be required to pay a fee of $1.50 a day for board and residence.

The charges for tuition and room rent are not subject to remission or reduction under any circumstances. Rooms cannot be reserved for a shorter period than the University Session. In case of prolonged illness and absence from College for a period of six weeks or more, a proportionate reduction is made in the charge for board.

All fees are payable to the Bursar, McGill University, on October 3rd and 4th. *Notice of withdrawal should be given at the close of the session, or not later than September 1st.*

PHYSICAL EDUCATION.

Every student on entering the College is required to pass a physical examination.

The physical education offered to undergraduate students includes educational, remedial and recreative gymnastics.

The educational gymnastics are based on anatomical and physiological laws; the exercises aim at producing the highest degree of health in each individual, thus contributing to mental as well as to physical efficiency. The course of exercise, which is progressive throughout each session, encourages the harmonious development of the nervous and muscular system, and provides a remedy for incorrect habits of sitting, standing and walking. A remedial gymnastic course is prescribed for undergraduate students who are physically unfit for ordinary class work.

Work in the Physical Education Department, amounting to 140 hours during the four years' course, is required of all undergraduate students. The periods are used for instruction in personal hygiene and for educational, remedial and recreative gymnastics, according to the physical requirements of the individual. Attention is given in the senior years to the subject of health problems. No student is asked to do work unsuited to her physique and students debarred from exercise of any kind are dealt with separately and carefully advised.

The Physical Director for Women arranges all regulations regarding necessary attendance and the substituting of recreative for educational gymnastics.

In all cases of absence the student is required to report to the Physical Director for Women. The ordinary interpretation of the one-eighth rule concerning absences does not apply in this Department. Every student is required to wear the costume recommended by the Department.

Recreative gymnastics in the form of basket ball, tennis, ice-hockey, fancy skating and athletic sports, are organized by the Athletic Association, under the supervision of the Department of Physical Education. All students are examined by the Medical Officer, and the Physical Director for Women, and are required to pass satisfactory physical tests before taking part in any of these activities.

Students of Music in residence are also required to attend educational gymnastic classes. Educational and recreative gymnastics are open to all partial students on payment of a fee of $5.00 for a class of two periods a week.

Strathcona Prizes are offered in this Department under the conditions stated under the Department of Physical Education in the Bulletin of General Information.

A course of instruction, theoretical and practical, is offered to undergraduates of the Fourth Year, who are preparing for the Academy Diploma, attendance being required by the Department of Education as follows:—

A course of 54 hours on the principles and practice of physical education. The course will cover elementary anatomy, physiology and hygiene, the theory of gymnastics and class teaching.

Students who satisfactorily complete this course are entitled to certificate "B" of the Strathcona Trust, and their work is included in the requirements for the High School Diploma of the Province of Quebec.

Provision is made by the Department for the care of the health of women undergraduate students during the University session.

A leaflet giving information concerning instruction and concerning the health scheme will be supplied to all students at the opening of the session.

MUSIC.

Students taking courses in music leading to the degree or diploma are eligible for residence in the College.

Instruction in music is offered at the McGill Conservatorium of Music—Director, Dr. H. C. Perrin; Vice Director, Miss Clara Lichtenstein, Resident Lecturer in the Royal Victoria College. Students may prepare for the degree examination in music of the University, or for the Diploma of Licentiate in Music.

For information regarding courses in music, see pages 367-396.

COLLEGE SOCIETIES.

The students maintain the following societies:—The Undergraduates' Society, the Athletic Society, the Delta Sigma Literary and Debating Society, La Société Française, the Women Students' Christian Association.

EXAMINATION TIME TABLES.

FACULTY OF ARTS.

FIRST TERM EXAMINATIONS, 1924.

	First Year	Second, Third and Fourth Years.
Tuesday, January 15, 1924 —		
9–12 A.M.	Th. of Equations, 2 Geometry, 1* Algebra (Com.)	Economics, 10.*
2–5 P.M.	Greek, 1 & 2. Physics, 1 (B.Sc. & Com.).	Physics, 4. English, 15.*
Wednesday, January 16—		
9–12 A.M.	English, 2 & Com.	Economics, 4.*
2–5 P.M.	Latin, 1. Economics (Com.).	Physics, 10.*
Thursday, January 17—		
9–12 A.M.	German, 1, 2, 3. Accountancy.	Chemistry, 4.* English, 13.* Geology, 3.* Accountancy.
2–5 P.M.	History, 1. Geometry (Com.).	Geology, 1. Economics 6*
Friday, January 18—		
9–12 A.M.	French, 1, 12.*	Economics, 12.* Chemistry, 2.
2–5 P.M.	Physics, 1 (B.A.). Zoology, 1 Spanish.	English, 19.* Chemistry, 1, 3 (a).*
Saturday, January 19—		
9–12 A.M.	Trigonometry, 1, 2, & Com.	Chemistry, 14.* Geometry, 3.* Education, 1.*

Courses marked * are final.

EXAMINATION TIME TABLES.

Faculty of Arts.

Sessional Examinations, 1924. Subject to Revision.

Date	Forenoon	Afternoon
Monday, May 5th.....	Botany, 4 Latin, 11 Geology, 1 History, 2, 6 Mathematics, 8 French, 1, I. Com., 10 Hebrew, 7 Philosophy, 15 Physics, 8A	Chemistry, 16 Latin, 11 English, 16 Geology, 1 History, 2, 6 French, 1, I Com., 10. Hebrew, 7 Physics, 10 Insurance (III Com.)
Tuesday, May 6th.....	Botany, 3 Greek, 11 Latin, 3 English, 19 History, 4 Physics, 4 French, 2 German, 1, 2 Hebrew, 2 Philosophy, 16 Geology, 4 English (II Com.) Accountancy, P.	Greek, 11 Latin, 3 Geology, 9 Mathematics, 5, 6 French, 2 German, 1, 2 Hebrew, 2
Wednesday, May 7th.....	Chemistry, 5 Latin, 1 English, 6, 25 History, 3 Mathematics, 3, 8 French, 4, 11 Philosophy, 1 Zoology, 4 Accountancy (I Com.)	Economics, 5 Latin, 1 French, 4, 11 Physics (I Com.)
Thursday, May 8th.....	Chemistry, 13 Greek, 1, 5 English, 18 Hebrew, 8 Philosophy, 2, 14 Physics, 5B Spanish (I Com.) Mathematics (II Com.)	Geology, 7 Hebrew, 8 Philosophy, 2 Physics, 5A Spanish (I Com.)
Friday, May 9th.....	Greek, 2 Economics, 1 English, 10 Chemistry, 15 Mathematics, 1(a), 2, I Com. German, 5 Physics, 6A Zoology, 5 Econ. & Com. Geog. (II & III Com.)	Geology, 10 Mathematics, 1(c), 2, I Com. German, 5 Physics, 3B, 6B. Econ. & Com. Geog. (II & III Com.)
Saturday, May 10th.....	Chemistry, 6 Greek, 4, 12 Economics, 7 English, 11 History, 1 Mathematics, 7 French, 3 Philosophy, 9 Physics, 2, 7 Hebrew, 12 Spanish (Adv.)	Greek, 4, 12 Geology, 11 Physics, 3A, 7, 8 Spanish (Adv.)

SESSIONAL EXAMINATIONS, 1924.

DATE	FORENOON	AFTERNOON
Monday, May 12th.....	Chemistry, 1 (Dr. Ruttan) Latin, 12 Economics, 2 History, 7 Mathematics, 9 Hebrew, 1 French, 7 German, 6 Philosophy, 13 Econ. & Com. Geog. (I Com.) Accountancy, Q	Chemistry, 7A, 7B Latin, 12 Economics, 2, 11 French, 7 German, 6 Econ. & Com. Geog. (I Com.) Accountancy (II Com.)
Tuesday, May 13th.....	Chemistry, 2, 9 Latin, 2 Economics, 13 English, 2, 9 History, 5 Hebrew, 5 Statistics (III Com.)	Latin, 2 English, 1 Mathematics, 4 (Anal. Geom.) Hebrew, 11 Philosophy, 3 Investigation Practice (III Com.)
Wednesday, May 14th.....	Chemistry, 1 (Prof. Evans), 3(b), 5 Economics, 3 English, 14 Hebrew, 3 Physics, 1 Social Science, 1 History of Music	Botany, 2 Economics, 3 Hebrew, 3
Thursday, May 15th.....	Botany, 5 Chemistry, 10 Economics, 5 English, 4 History, 8 Mathematics, 10 German, 7 Social Science, 3 Latin (Private Rdgs.)	Mathematics, 10, 4 (Cal.) German, 7 Hebrew, 10 Commercial Law
Friday, May 16th.....	German, 3, 9 Hebrew, 9 Philosophy, 15	German, 3, 9, 10 Hebrew, 9 Philosophy, 5
Saturday, May 17th.....	German, 4 Zoology, 2	Education, 2

COURSE FOR THE DEGREE OF BACHELOR OF COMMERCE.

The course extends over four years, and students who successfully complete it will be granted the Degree of Bachelor of Commerce (B.Com.).

Students entering Second or Third Year Commerce in the session 1923-24 will follow the Three Year Course as laid down in the Commerce Bulletin for 1922-23, and as here reproduced. Such students must, however, carefully note that a failure to pass final examinations in due course will necessarily bring them under the new regulations. Present First Year students who fail to pass into the Second Year next October will be obliged to follow the Four-Year Course.

The curricula are as follows:—

I. THREE YEAR CURRICULUM.

SECOND YEAR (THREE-YEAR CURRICULUM).

English .....

Four of the following:

Accountancy.....
Mathematics.....
Economics and Commercial Geography.....
French or Spanish or German.....
German or Spanish or French.....
Commercial Law.....
Chemistry.....

THIRD YEAR (THREE-YEAR CURRICULUM).

Five of the following:	Prerequisites.
Accountancy P. (including Business Organization and Industrial Organization).....	Second Year Accountancy.
Accountancy Q. (advanced)*.....	
French or Spanish or German†.....	
German or Spanish or French†.....	
Economics.....	Second Year Economics.
Economics (advanced).....	
Actuarial Mathematics.....	Mathematics 2,3 and 4 of the Arts Course.
Statistics..... / Investigation Practice. / Insurance.....	Second Year Mathematics.

VISITS TO FACTORIES FOR THIRD YEAR STUDENTS.

A number of visits will be arranged to important manufacturing concerns in and around Montreal.

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*Students who desire to take Accountancy Q. (advanced) in the Third Year must satisfy the following conditions:

(a) They must also take Accountancy P.

(b) They must have taken Mathematics in the Second Year.

(c) They must have obtained at least 65% at the examinations in Accountancy of the Second Year, or an average of at least 65% at the examinations in this subject of the First and Second Years together.

(Students failing to reach this 65% margin may present themselves again for examination at the September supplementals.)

†A language cannot be selected in the Third Year unless it had been taken in the two preceding years; a second language cannot be chosen unless it had been studied in at least one of the two preceding years.

II. FOUR YEAR CURRICULUM.

FIRST YEAR (FOUR YEAR CURRICULUM).

(a) Obligatory Subjects

1. **English.**
2. **Mathematics.**
3. **French,** or **Spanish,** or **German.**
4. **Accountancy.**

(b) Optional Subjects (two to be chosen)

5. **Latin,** or **Greek.**
6. **German,** or **Spanish,** or **French.**
7. **Physics,** or **Biology,** or **Chemistry.**
8. **General History.**

N.B.—(a) High School Physics is a prerequisite to Chemistry in No. 7 above.

(b) Students intending to take up Actuarial Science in the Fourth Year must take the Honour Course in Mathematics instead of No. 2 above.

SECOND YEAR (FOUR-YEAR CURRICULUM).

(a) Obligatory Subjects

1. **French,** or **Spanish,** or **German** (continued).
2. **Accountancy.**

(b) Optional Subjects—(Three to be chosen)

3. **Economics and Economic Geography.**
4. **English.**
5. **Mathematics.**
6. **Mathematics, Honour Course.**
7. Psychology.
8. **German,** or **Spanish,** or **French** (continued)
9. **Chemistry.**

N.B.—Nos. 5 and 6 must be taken by students proceeding to Actuarial Science in the Fourth Year.

THIRD YEAR (FOUR-YEAR CURRICULUM).

(a) Obligatory Subjects

1. **French,** or **Spanish,** or **German** (continued).

(b) Optional Subjects—(four 3-hour courses, or their equivalent, to be chosen).

2. **Accountancy.**
3. **Business Organization and Industrial Organization** (½ course).
4. **Economics and Economic Geography.**
5. **Mathematics** (Honour Course).
5a. **Mathematics** (Honour Course).
6. **Statistics.**
7. **German,** or **Spanish,** or **French** (continued).
8. **Business and Industrial Psychology** (½ course).
9. **Commercial Law.**
10. **Economics,** advanced course.
11. **English** (Argumentation and Debate).
12. **Technology** (same as No. 12 in Fourth Year).

N.B.—(a) Only half credit will be given to a second modern foreign language begun after the Second Year. Students should further note that time-table complications may make it impossible to begin a second language in any Year except the First.

(b) Both 5 and 5a must be taken by students proceeding to Actuarial Science in the Fourth Year.

(c) Course No. 11 on Argumentation and Debate may be taken either in the Third or the Fourth Year.

(d) Course No. 12 on Technology may be taken either in the Third or the Fourth Year.

(e) First and Second Year Accountancy are prerequisites to No. 2 above.

(f) Second Year Economics is a prerequisite to courses Nos. 4 and 9 above, and No. 4 above is a prerequisite to No. 9 above.

(g) Second Year Psychology is a prerequisite to No. 8 above.

(h) Physics in the First Year and Chemistry in the Second Year are prerequisites to Technology.

FOURTH YEAR (FOUR-YEAR CURRICULUM).

(Five 3-hour courses, or their equivalent, to be taken)

1. **French**, or **Spanish**, or **German** (continued).
2. **Spanish**, or **German**, or **French** (continued).
3. **Accountancy.**
4. **Economics and Economic History.**
5. **Actuarial Science.**
6. **Honour Mathematics.**
7. **Law.**
8. **Transportation and Marine Insurance.**
9. **Marketing Problems.**
10. **Economics, advanced.**
11. **English, Argumentation and Debate** (same as No. 11 in the Third Year).
12. **Technology** (same as No. 12 in the Third Year).

N.B.—(a) No. 4 in the First Year, Nos. 2 and 5 in the Second Year, Nos. 2, 3 and 9 in the Third Year, and No. 7 above are all prerequisites to Fourth Year Accountancy (No. 3 above).

(b) No. 3 in the Second Year, and No. 4 in the Third Year are prerequisites to Nos. 4 and 10 above, and No. 4 above is a prerequisite to No. 10 above.

(c) The Honour Mathematical Courses prescribed in the first three years, No. 5 in the Second Year and No. 6 in the Third Year are all prerequisites to Actuarial Science (No. 5 above).

DIPLOMA OF LICENTIATE IN ACCOUNTANCY.

To obtain the diploma of **Licentiate in Accountancy,** which carries with it right of entrance into the Association of Accountants in Montreal (Chartered Accountants), or into the Institute of Accountants and Auditors of the Province of Quebec, the student must satisfy the following conditions:—

(a) He must pass all the examinations required for, and leading up to, the Degree of Bachelor of Commerce.

(b) He must pursue the course of studies prescribed in this programme for Accountancy students.

(c) He must comply with all ordinances regulating the practical work to be done by students during the vacation.

(d) He must spend at least one year, subsequent to his obtaining the Degree of Bachelor of Commerce, in the office of a practising accountant.

(e) He must then pass successfully a Final Examination in Accountancy and Auditing before a board of five examiners, composed as follows: the Director-Secretary of the School of Commercial Studies, two Professors of McGill University, a member of the Association of Accountants in Montreal, and a member of the Institute of Accountants and Auditors of the Province of Quebec; or before a board composed of four examiners, in case either of the Associations mentioned fails, after due notice, to nominate its delegate; or before a board composed of three examiners, in case each of the Associations mentioned fails to nominate its delegate.

This examination will be held during the last week of the month of October each year.

COURSES OF LECTURES.

ACCOUNTANCY.

The accountancy work has been carefully graduated and correlated, and is intended not merely to fulfil its part in a general scientific business training, but also to prepare and assist those who purpose taking up accountancy as a profession.

No previous knowledge of bookkeeping is assumed or required; the subject is developed rapidly along the lines that prevail in practice.

FIRST YEAR.

The following plan will give a good indication of the ground covered in this Year:—

The principle of debit and credit; books of original record, how they should be kept, and how utilized; documents employed in connection with them; sales, purchases, consignments, and how to handle them; returns inwards and returns outwards; subsidiary ledgers, and controlling accounts to represent them in the general ledger; special forms of cash-book required to facilitate such control; notes and drafts, discounting and renewal of notes, and the proper methods of treating these operations in the accounts; single entry, how to change to double entry, and vice versa; distinction between revenue and capital expenditure; income statement and balance sheet; single proprietorships and partnerships.

The student will be required to sift and classify his detail, write up all the books of record and account mentioned, and focus results of the various transactions or operations into the final statements.

SECOND YEAR.

The subject matter for this Year will be as follows:—

Special problems that occur in connection with partnerships.—The deed of partnership; rights of partners; effects of dissolution; methods of distributing profits; the bringing in of other partners; goodwill; transformation of a firm into a corporation; departmental accounts; organization and records required; sectional balancing of ledgers and systems of internal check; analysis of expenses; distribution of expenses over departments; results in each department; comparison of these results with those shown in other periods; manufacturing accounts; the elements of cost accounting; records to take care of purchases; the voucher system; depreciation and methods of providing for it; allowances and reserves; sinking funds.

THIRD YEAR.

(Corresponds to Accountancy P., old scheme)

The work of the Third Year will embrace:—

(a) Theory of the Balance Sheet.—Its form and elements; valuation of these elements; comparative balance sheets and deductions to be drawn from them; double account system; the income statement.

(b) Corporation Finance.—Development of the corporation; status and interior organization of the corporation; how to incorporate; different classes of corporation; promotion and underwriting; stock and bond issues; temporary loans; initial operations; earnings and their disposition; secret reserves; betterments; surplus; control exercised by directors and majority stock-holders; its abuse; consolidations; insolvency; re-organizations; different bases of capitalization; problems connected with stock and bond issues; bonus stock; treasury stock; watered stock; discount and premium on bond issues.

(c) Export Houses.—Records and Accounting system required.

(d) Cost Accounting.—General considerations; advantages of cost systems.

FOURTH YEAR.

(Corresponds to Accountancy Q., old scheme.)

(Intended especially for students proceeding to a Diploma in Accountancy, although this course may be taken by all students who have reached the required standard.)

Cost Accounting.—Control of stores, purchasing and issuing, the running inventory; quality, remuneration, and control of labour, different methods of distributing overhead expenses or "burden" and their limitations; calculation of machine-rates; waste and leakage in factories; idle time; forms used in different "job and process" costing systems; how selling price is computed; connection of cost records with general accounts.

Branches, Consolidations, Mergers.—Accounts of head office and of branches; consolidated statements and balance-sheets; holding corporations; control of stock and bond issues; minority holdings; advances to subsidiaries; inter-company profit; capital assets and capital liabilities; initial surplus and goodwill.

Insolvency Accounts.—Various schedules adopted; statements of affairs; realization and deficiency account; deficiency statement.

Auditing.—Considerations applicable to all undertakings, and special considerations applicable to particular concerns; laboratory practice in auditing.

Trustees' Accounts.—Executorships and administratorships; accrued claims; accrued expenses; corpus and income.

Accounting in Insurance Companies.—General considerations; systems used.

Bank Accounts.—General considerations.

Municipal Accounts.—General considerations.

Peculiarities in the form of accounts required in other undertakings.

BUSINESS ORGANIZATION AND SCIENTIFIC MANAGEMENT.

A course of lectures extending over the Second and Third Years and dealing with the following subject-matter:

I. Commercial Organization: Development of organization; study of markets; organization of an export business; sources of information; consular service; fundamental principles of banking and exchange; study of the various problems connected with distribution; the purchasing department; the sales department; the credit department; the traffic department; advertising; organization of accounts; preparation of periodical reports.

II. Industrial Organization: The launching of an industrial enterprise; the planning of a factory; departmental functions; the purchase and control of raw materials; labour, and its control; wage systems; welfare work; power and its transmission; the reorganization of a factory; the committee system; the location of industries; principles of management; types of management; departmental relations; standardization and equipment; standardized operations; written standard-practice instructions; adequate records; efficiency rewards.

The student will be required to write in idiomatic English a summary of each lecture.

LAW.

THIRD YEAR.

First Term: (a) Introduction to the study of Law (legal concepts and terms; the two systems in Canada; Common Code and Statute Law.)
(b) Elementary principles of the Law of Contract.

Second Term: (a) Partnership and Company Law.
(b) Sale of Goods.

FOURTH YEAR.

First Term: (a) Bankruptcy.
(b) Negotiable Instruments.
(c) Income-Tax.

Second Term: (a) General principles of direct and vicarious liability for accidents.
(b) Insurance Law.
(c) Public International Law.

PHYSICS.

The course in Commercial Physics consists of two lectures and a two-hour laboratory period each week. The object of the course is to introduce the students to the various laws and principles of physics and to make them familiar with the principles underlying the appliances and phenomena of every-day life. In the laboratory the students are required to make

measurements and observations under the guidance of instructors. The following headings are indicative of the nature of the course given:—

Simple machines; mechanics of liquids and gases; elasticity and strength of materials; accelerated motion; force; energy; momentum; effects of heat; heat engines; a history of the developments in magnetism and electricity; battery currents; induced currents; electric power; alternating current machines; sound production and transmission; sound phenomena; sound as related to music; lamps and reflectors; lenses and optical instruments; spectra and color phenomena; Roentgen rays and electric waves in general.

CHEMISTRY.

The course includes a study of the more important elements and compounds, the general laws and principles and the fundamental theories of the science; with as many industrial applications as time will allow. The lectures are illustrated with specimens, experiments, diagrams, lantern-slides, etc. The general intention of the course is to give a thorough training in the basic principles of the science and their applications, so that chemical problems arising in connection with future work and study may be intelligently considered.

Text-Book:—McPherson and Henderson, "A Course in General Chemistry."

TECHNOLOGY.

A course dealing with commercial products (of the forest, of the mine, of the sea) and their preparation for market.

MATHEMATICS.

FIRST YEAR.

In this Year the work will be that prescribed for First Year Arts students and will afford a sound training in general mathematics.

SECOND YEAR.

Theory of interest, annuities certain, the Amortization Schedule and sinking funds; determination of the purchase price and "yield" of annuity, "straight-terms"; serial and other bonds; bonds from the point of view of the issuer; Building and Loan Associations; mathematical treatment of depreciation; valuation of mines.

Text-Books:—Rietz, Mathematics of Finance; Mackenzie, Interest and Bond Values; Sprague, Mathematics of Accounting; Walton and Finney, Mathematics of Accounting; King, Theory of Finance; Saliers, Depreciation.

ACTUARIAL SCIENCE.

(a) Advanced theory of interest.

(b) Life contingencies (including life annuities and insurance; the mortality table and monetary and other tables based thereon; construction of tables; probabilities of life; expectations of life; probabilities of survivorship; formulas of Demoivre, Gompertz and Makeham; annuities and assurances; successive lives; policy values; life interests and reversions.

Text-Books:—Institute of Actuaries (Pts. 1 & 11); Henry, Finite Differences; Dawson, Insurance; Faekler, Insurance.

STATISTICS.

(a) Introductory course on elementary co-ordinate Geometry and Finite Differences.

(b) Scope and meaning of statistics; classification and tabulation; averages; accuracy; application of graphical methods to business problems; construction and use of various "Business Barometers;" index numbers.

Books:—Bowley, Elements of Statistics (Pt. 1); Yull, Theory of Statistics; Copeland, Business Statistics; Elderton, Primer of Statistics; Brown and Brown, Finite Differences.

ECONOMICS AND ECONOMIC GEOGRAPHY.

SECOND YEAR.

(a) Introduction to Economics.

(b) Introduction to Economic Geography.

THIRD YEAR.

Economics: Economics of distribution, with special reference to profits and wages; efficiency of labour, as influenced by wages, hours and conditions; efficiency of organization; fair and unfair competition; trusts, cartells and associations; labour combinations; employers' associations; modern developments in relations of capital and labour; economic effects of Acts of Government. *Geography*: Distribution of population and localization of industry outside of Canada; main trade routes of the world. (This course is given to the combined Third and Fourth Years every second year, alternating with the course on Economics and Economic History).

FOURTH YEAR.

Economics: Economics of exchange, with special reference to money and credit; mechanism of promotion and underwriting; supply of short period capital; capitalization of profits; credit policies of business units; statistical and economic aspects of companies, profits, etc.; economic

functions of security exchanges. *History*: Development of specialized production and exchange since the Middle Ages; economic development of the British Empire and of the Great Powers in the nineteenth and twentieth centuries.

ADVANCED ECONOMICS.

Courses of especial value to Commerce students in Economics will be laid down in the Third and Fourth Years.

TRANSPORTATION AND MARINE INSURANCE.

Administration and organization of inland and ocean transportation, including the early history of transportation; meaning and importance of railroad statistics; transport and storage of commodities of a perishable and special character; transportation law, marine insurance.

MARKETING PROBLEMS.

Organization of wholesale markets: grading of products; produce exchanges; terminology, reports, quotations; governmental regulations, retail store management, including problems of buying, stocking, selling; rapidity of turnover, organization of special sales; sales policies and methods: distribution; price; credit; sales campaigns; advertising, and the factors which control human action in buying and selling; competition, and methods of meeting it; handling of enquiries; claims and complaints; selection, training and management of sales force.

ENGLISH.

The fundamental purpose of the course in English is to train students to deal with such problems of expression as arise in commercial life. Considerable attention will be given to business correspondence and other forms of commercial writing. The interests of students, however, are best served, even for these special purposes, by a more general training in English. These courses will, therefore, include practice in various kinds of writing, as well as a study of English literature, in which a large amount of reading is required. As far as possible, the writing prescribed for students will be related to the work they are doing in other classes.

The following is a brief outline of the work:—

FIRST YEAR.

English 1. English Composition, one hour a week. Weekly individual conferences with the instructor are required. Mr. Noad.

English 2. English Literature, as prescribed for students in the Faculty of Arts,—a general outline course from Chaucer to Kipling. Readings and fortnightly individual conferences. Two hours a week. Associate Professor Macmillan and an assistant.

SECOND YEAR.

English Literature.—Choice of Second Year Arts Courses.

THIRD YEAR OR FOURTH YEAR.

Argumentation and Debate, with preparation of briefs, etc.

FRENCH.

The study of French will be first approached from the literary side, both in order to increase its value to the student as an element of culture and in order to afford a sufficient background for the commercial studies which are to come later. These commercial studies will begin in the Second Year, and will comprise about half of the work done in that Year. In the Third Year the work will be almost entirely of a commercial character.

The following is a synopsis of the work:—

FIRST YEAR.

The student will have a choice between:—

(a) The Advanced Arts Course in French and (b) The Ordinary Arts Course in French, strengthened by tutorial class work.

SECOND YEAR.

In this Year the work will be divided into two sections:—

I. A selected Arts course.

II. Work of a commercial nature, embracing:—

Commercial Correspondence:—Letters of introduction, offers of services, inquiries, acceptance of offers, execution of orders, circulars, invoices and account sales; study of trade reports and commercial documents; study of contracts—bills of sale, mortgage deeds, bills of lading, charter-party, insurance contracts.

THIRD AND FOURTH YEARS.

During these Years one hour a week will be devoted to a study of modern French literature. The remaining hours will be taken up with commercial work, which may be conveniently divided into—

(a) Commercial correspondence, study of trade reports, etc., in continuation of work begun in the Second Year; and (b) colloquial French.

(The text-book to be used for this part will be P. Clerget, Manuel d'économie commerciale.)

SPANISH.

The study of Spanish will extend through all four Years, and will first be approached from the literary side. In the Second, Third and Fourth years increasing weight will be given to commercial matters.

The following Text-books will be used:—

FIRST YEAR.

Coester's Spanish Grammar (Ginn & Co.); Loiseaux's Spanish Composition (Silver, Burdett & Co.); Jimenez's "Platero y yo" (Heath & Co.); Valera's "El pajaro verde" (Ginn & Co.); Quintana's "Vida de Blasco Nuñez de Balboa" (Ginn & Co.); prescribed portions of José Rogerio Sanchez's "Historia de la lengua y literatura españolas."

SECOND YEAR.

Coester's Spanish Grammar; Cool's Spanish Composition (Ginn & Co.); Moratin's "El si de las niñas" (Ginn & Co.); Selections from Don Quixote (Heath & Co.); Antologia de cuentos españoles, (Heath & Co.); prescribed portions of José Rogerio Sanchez's "Historia de la lengua y literatura españolas."

THIRD YEAR.

Coester's Spanish Grammar; Cool's Spanish Composition (Ginn & Co.); Cervantes' "Rinconete y Cortadillo" (Oxford Press); Garcilaso de la Vega's first eclogue (Oxford Press); Hartzenbusch's "Los amantes de Teruel" (Heath & Co.); prescribed portions of José Rogerio Sanchez's "Historia de la lengua y literatura españolas"; Romera-Navarro's "Manual del Comercio" (Holt & Co.).

FOURTH YEAR.

Oxford Book of Spanish Verse, selections from: Calderon's "Alcalde de Zalamea" (Heath & Co.); Becquer, Legends, Tales and Poems (Ginn & Co.); José Rogerio Sanchez's "Historia de la lengua y literatura españolas."

Romera-Navarro's "Manual del Comercio"; other books (to be prescribed) dealing with commerce and industry.

GERMAN.

The study of German will extend through all four Years.

The Arts courses in German are available to Commerce students.

Provision will also be made for instruction in Commercial correspondence.

SCHOOL OF COMMERCE LECTURE TIME-TABLE.

SESSION 1923-24.

Hour	Year	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9	1	Maths. 2 (sp) (A.108) French, Sect. I (A.115) Maths. Sect. I (A.107)	German (A.114)	Maths. 2 (sp) (A.108) French, Sect. I (A.115) Maths. Sect. I (107)	Physics German (A.114)	Maths. 2 (sp) (A.108) French, Sect. I (A.115) Maths. Sect. I (A.107)	Physics German (A.114)
	2	Accountancy (A. 100)	English (A.5)	Accountancy (A.100)	English (A.5)	Accountancy (A.100)	English (A.5)
	3	Spanish (A.110)	Acct. (P) (A.100)	Spanish (A.110)	Acct. (P) (A.100)	Spanish (A.110)	Acct. (P) (A.110)
10	1	Accountancy (A.100)	Spanish (A.110)	Accountancy (A.100)	Spanish (A.110)	Accountancy (A.100)	Spanish (A.110)
	2	French (A.115) Maths. 3 (sp) (A.108)	Maths. (A.3)	French (A.115) Maths. 3 (sp) (A.108)	Maths. (A.3)	French (A.115) Maths. 3 (sp) (A.108)	Maths. (A.3)
	3		French (A.100)		French (A.100)		French (A.100)
11	1	French, Sec. II (A.114) Maths. Sect. II (A.100)	History	French, Sec. II (A.115) Maths. Sec. II (A.100)	History	French, Sec. II (A.115) Maths. Sec. II (A.100)	History
	2	German (A.114)	Spanish (A.108)	German (A.114)	Spanish (A.108)	German (A.114)	Spanish (A.108)
	3	Econs. (A.3) Econs.	Statistics (A.5)	Econs. (A.3) Econs.	Inv. Pr. (A.5)	Econs. (A.3) Econs.	Insurance (A.5)
12	1	English (Biol.)	Maths. 4 (sp) (A.108)	English (Biol.)	Maths. 4 (sp) (A.108)	English (Biol.)	Maths. 4 (sp) (A.108)
	2						
	3	Acct. (Q) (A.100)		Acct. (Q) (A.100)		Acct. (Q) (A.100)	
2	1		Special and Tutorial Classes.		Special and Tutorial Classes.		
	2						
	3	Adv. Econs. (A.5)		Adv. Econs. (A.5)		Adv. Econs. (A.5)	
3	1						
	2	Chemistry (C)		Chemistry (C)		Chemistry (C)	
	3	Adv. Econs. (A.5) German (A.114)		Adv. Econs. (A.5) German (A.114)		Adv. Econs. (A.5) German (A.114)	
4	1						
	2			Physics		Physics (Ph.)	
	3						
5	1						
	2	Com. Law (A.115)		Physics Com. Law (A.115)		Physics (Ph.) Com. Law (A.115)	
	3						

A.—Arts Building. Numeral indicates number of room. Biol.—Biological Building. C.—Chemistry Building. Ph.—Physics Building.

FACULTY OF APPLIED SCIENCE.

DEGREES, EXAMINATIONS AND SOCIETIES.

1. DEGREES.

The degrees conferred by the University upon such undergraduates of the Faculty as fulfil the conditions and pass the examinations hereinafter stated are "Bachelor of Architecture" (B.Arch.) and "Bachelor of Science" (B.Sc.), mention being made in the diplomas of the latter of the particular course of study pursued.

Students who take the Bachelor of Science degree in one of the courses provided by the Faculty may graduate in any of the remaining courses by attending one or more subsequent sessions and passing the prescribed additional examinations.

For particulars regarding the Double Course for the degrees of B.A. and B.Sc., see page 137.

PRIVILEGES FOR HOLDERS OF THESE DEGREES.

Among the privileges enjoyed by Graduates in Engineering, the following may be specially mentioned:—

(1) By a resolution of the Institution of Civil Engineers (England) the holders of the degree of B.Sc., in the courses of civil, electrical, mechanical and mining engineering, who are desirous of becoming Associate Members of the Institution, may under certain conditions be exempted from the examination prescribed for admission to the Institution.

(2) By the Dominion Lands Surveys Act, any graduate in Civil or Mining Engineering may have his term of apprenticeship for the Dominion Land Surveyors' certificate shortened from three years to one.

(3) An arrangement has been concluded between McGill University and the Province of Quebec Association of Architects, whereby holders of the Bachelor of Architecture degree are admitted to practice in the Province after spending one year in the office of a member of the Association, and passing an examination in design, instead of having to take the regular prescribed entrance examinations. The office experience may be gained by working in the summer vacations.

2. EXAMINATIONS.

1. Final examinations are held in all lecture subjects. Class examinations, for which credit may be given in the sessional standing, are held from time to time, at the option of the professor.

2. Students who have failed in one or more subjects of the curriculum shall (except in cases where they are called upon to repeat their year) be required to make good their standing by passing:

(a) The regular supplemental examinations held immediately before the opening of the session, or

(b) The final examinations in a subsequent session, or

(c) Special examinations, which shall be given only under exceptional circumstances and by authority of the Faculty.

3. Failures in drafting and laboratory subjects may under certain conditions be made good by attendance on special classes during the afternoon of the first six weeks of the following session.

4. No undergraduate will be allowed to take instruction in any subject until he has passed the examinations in the necessary prerequisite subjects, for particulars regarding which, see page 270.

3. ENGINEERING SOCIETIES.

1. The headquarters of the Engineering Institute of Canada are located in Montreal. Students in all departments of engineering are strongly recommended to become student members of the Institute, which they can do on payment of a fee of $3.00. They are then entitled to the monthly journal of the Institute, and to the use of the Institute's rooms, 176 Mansfield Street. They also have opportunities of meeting the prominent engineers of the country, and of being present at the fortnightly sessions, at which papers are read on current engineering subjects and works of construction.

2. Students in Mining and Metallurgy are strongly recommended to become members of the McGill Mining and Metallurgical Society, which, although a student body (see page 260), is affiliated with the Canadian Institute of Mining and Metallurgy, the headquarters of which are in Montreal. Members of this Society receive the Monthly Bulletin or the Transactions of the Institute without extra expense, and are entitled to attend all meetings and to compete for the prizes offered.

Students are invited to compete for the prizes which are offered by the Institutes above mentioned.

COURSES OF INSTRUCTION.

The instruction in this Faculty is designed to afford a thorough training of a practical as well as theoretical nature, in the following branches of applied science:—

I.—Architecture.
II.—Chemical Engineering.
III.—Civil Engineering and Surveying.
IV.—Electrical Engineering.
V.—Mechanical Engineering.
VI.—Metallurgical Engineering.
VII.—Mining Engineering.

NOTE:—A course is also offered in Engineering Physics, particulars of which are given on pages 131 and 221.

Military Instruction (subject No. 400) may be given as alternative to certain subjects in connection with Courses II to VII inclusive (see pages 209 to 220).

CURRICULUM.

The curriculum as laid down in the following pages may be changed from time to time as deemed advisable by the Faculty, and in no case shall it be binding beyond the session covered by this calendar announcement.

The regular work of the session 1923-4 will begin on October 1st, 1923, and will end about May 27th, 1924. In the first three years the last month of this period is devoted to field or laboratory classes, details of which are given under "Summer Schools" (see page 222).

The work prescribed for the first two years is the same in all courses, except in that leading to the degree of Bachelor of Architecture (Course I).

The first two years of the engineering courses (II to VII) are mainly devoted to Mathematics, Mechanics, Physics, Chemistry, Drawing and Shopwork, as it is deemed necessary that students in these courses should master the general principles underlying scientific work before commencing the professional subjects.

I. ARCHITECTURE.

The course for the degree of Bachelor of Architecture extends over five years. Full information is given in the Announcement of the Department, which will be sent to interested persons upon request to the Registrar of the University.

The work of the First Year is similar in most respects to that of the first year in other Departments in Applied Science, but special instruction is given in drawing and architectural geometry.

The object of this curriculum is to impart such general culture, scientific knowledge and skill of hand as will prepare the student to profit by the work of the succeeding years, under the heads of:—

(*a*) Design; (*b*) Aesthetic; (*c*) History; (*d*) Science; (*e*) Construction; (*f*) Professional Practice; (*g*) Drawing.

An essay on an historical or theoretical subject is required in each term from all students following the historical or theoretical courses.

In all courses studio work goes hand in hand with oral teaching, with a view to the practical application of the theory, while at the same time affording opportunity for the acquisition of power in draughtsmanship and practice in design.

FIRST YEAR.

SUBJECT	Subject Number	Lectures per week		Draughting Room and other periods per week		For details see page
		First Term	Second Term	First Term	Second Term	
General History	Arts (13)	2	2	..	..	229
English	131	2	2	..	..	244
Algebra	192	5	4	..	..	250
Geometry	191	2	..	..	..	249
Trigonometry	193	..	3	..	..	250
Mechanics	194	2	2	..	..	250
Physical Education	...	..	..	⅔	⅔	264
Physics	Arts (44)	2	2	..	..	230
Physics Lab	Arts (45)	..	..	1	1	230
Elements of Architecture	5	1	1	..	..	227
Architectural Geometry I	18	..	..	2	2	232
Architectural Drawing	33	..	..	1	1	231
Freehand Drawing	38	..	..	2	2	232

Any undergraduate student of the First Year in the course of Architecture who at the close of the first term has failed to obtain an average of 33 per cent. in the following five subjects, viz:—mechanics, geometry, algebra, physics and architectural drawing, may be required to withdraw from the Faculty.

Any other student of the First or any subsequent year, whose record is found to be unsatisfactory, may at any time be required to withdraw from the Faculty.

All students of the First Year in the Department of Architecture who have pursued their course of study without serious interference due to personal illness, domestic affliction or urgent affairs, and who fail in more than three subjects of the First Year, in which standing is determined by sessional examinations or in three such subjects aggregating over 350 possible marks, shall be required to repeat the work of the First Year, and while so doing shall be debarred from taking any more advanced work.

SECOND YEAR.

SUBJECT	Subject Number	Lectures per week		Draughting Room and other periods per week		For details see
		First Term	Second Term	First Term	Second Term	
Design A	1	..	..	2	2	227
Elements of Composition	6	1	1	..	..	227
Building Construction	24	1	1	..	..	230
Building Details	25	..	..	2	2	230
Arch. Engineering I	26	1	1	..	..	230
Arch. Eng. (Draughting) I	27	..	..	1	1	230
History of Classic Arch	14	2	2	..	..	229
Arch. Geometry II	19	..	..	1	1	232
Surveying	346	2	2	..	..	268
Mapping	348	..	..	1	1	268
Architectural Drawing	34	..	..	1	1	231
Freehand Drawing	39	..	..	1	1	232
Physical Education	..	..	..	⅔	⅔	264
Summer Work	50	..	..	..	..	232
Surveying Field Work	347	..	..	..	..	268
Architectural Essay	46	..	..	..	..	232

All students of the Second Year in the Department of Architecture who have pursued their course of study without serious interference due to personal illness, domestic affliction or urgent affairs, and who fail in subjects aggregating not less than 350 possible marks, shall be required to repeat the Second Year.

THIRD YEAR.

SUBJECT	Subject number	Lectures per week		Draughting Room and other periods per week		For details see page
		First Term	Second Term	First Term	Second Term	
Design B	2	..	..	5	5	227
Theory of Design*	7	1	1	..	..	228
Arch. Engineering, II A	28	1	1	..	..	231
Arch. Eng. (Draughting), II A	29	..	..	1	1	231
History of Mediaeval or Renaissance Arch.†	15 or 16	2	2	..	..	229
Ornament and Decoration.‡	9 and 10 or 11 and 12	1	1	1	1	228
Freehand Drawing	40	..	..	2	2	232
Architectural Drawing	35	..	..	1	1	232
Summer Work	50	..	..	..	..	232
Architectural Essay	47	..	..	..	..	232

FOURTH YEAR.

Design C	3	..	..	5	5	227
Theory of Planning*	8	1	1	..	..	228
Arch. Engineering, II B	30	1	1	..	..	231
Arch. Eng. (Draughting), II B	31	..	..	1	1	231
History of Mediaeval or Renaissance Architecture	15 or 16	2	2	..	..	229
Ornament and Decoration	9 and 10 or 11 and 12	1	1	1	1	228
Architectural Drawing	36	..	..	1	1	231
Freehand Drawing	41	..	..	1	1	232
Modelling	42	..	..	1	1	232
Architectural Essay	48	..	..	..	..	232
Summer Work	50	..	..	..	..	232

FIFTH YEAR.

Design D	4	..	..	7	7	227
Modern Architecture	17	2	2	..	..	229
Professional Practice	32	2	2	..	..	231
Engineering Law	175	1	1	..	..	249
Historical Drawing	37	..	..	1	1	232
Modelling	43	..	..	1	1	232
Hygiene	22	2	..	..	..	230
Heating and Ventilation	23	..	1	..	1	230
Architectural Essay	49	..	..	..	..	232
Summer Work	50	..	..	..	..	232

†The courses on Mediaeval and Renaissance Architectural History, numbers 15 and 16, are given in alternate years.

During the Session 1923-24, the History of Renaissance Architecture will be given.

‡Ornament and Decoration, courses numbers 9 and 10, and 11 and 12, are given in alternate years. During the Session 1923-24, numbers 9 and 10 will be given.

*The courses on Theory of Design and Theory of Planning, numbers 7 and 8, will be given in alternate years.

NOTE.—In the Department of Architecture after two failures in any subject a third examination will only be granted after the student concerned has taken special tuition of a character approved by the Department.

For summer reading, see pages 223 to 226.

II. ENGINEERING COURSES.

The subjects of instruction in the first two years of the Engineering Courses (II toVII), and the number of hours per week devoted to each, are as follows:—

FIRST YEAR.

SUBJECT	Subject Number	Lectures per week		Laboratory, etc., periods per week		For details see page
		First Term	Second Term	First Term	Second Term	
Algebra	192	5	4	..	..	250
Descriptive Geometry	341	1	1	⅔	⅔	243
*English	131	2	2	..	..	244
Freehand Drawing and Lettering	342, 343	1	1	⅔	⅔	243
Geometry	191	2	..	..	..	249
Mechanical Drawing	211	..	..	2	2	251
Mechanics	194	2	2	..	..	250
Physical Education	...	..	..	⅔	⅔	264
Physics	311	2	2	..	..	266
Physics Lab	312	..	..	1	1	267
Shopwork	212-14, 220	..	..	2	2	251
Shop Methods	215	1	1	..	..	251
Trigonometry	193	..	3	..	..	250

*The lectures will be supplemented by individual conferences with the instructors.

Any undergraduate student of the First Year, who at the close of the first term has failed to obtain an average of 33 per cent. in the following five subjects, viz:—mechanics, geometry, algebra, physics, and descriptive geometry, may be required to withdraw from the Faculty.

Any other student of the First, or any subsequent Year, whose record is found to be unsatisfactory, may at any time be required to withdraw from the Faculty.

All students of the First Year who have pursued their course of study without serious interference due to personal illness, domestic affliction or urgent affairs, and who fail in more than three subjects of the First Year, in which standing is determined by sessional examinations, or in three such subjects aggregating over 350 possible marks, shall be required to repeat the work of the First Year, and while so doing shall be debarred from taking any more advanced work.

SECOND YEAR.

SUBJECT	Subject Number	Lectures per week		Laboratory, etc., periods per week		For details see page
		First Term	Second Term	First Term	Second Term	
Anal. Geometry	197	3	..	..	..	250
Calculus	198	2	4	..	..	250
General Chemistry	51	3	3	..	..	233
General Chem. Lab	52	..	..	1	1	233
Mapping	348	..	..	1	1	268
Materials of Construction	81	1	1	..	..	237
Descriptive Geometry and Perspective	345	1	1	⅔	⅔	243
Physical Education	...	..	..	⅔	⅔	264
Mechanics	83	2	2	⅔	⅔	237
Mech. of Machines	218	..	1	..	⅔	252
Physics	315	2	2	..	..	267
Physics Lab	316	..	..	1	1	267
Shop Processes	221	1	1	..	..	252
Surveying	346	2	2	..	..	268
Surveying Field Work	347	..	..	..	..	268
Summer Reading	132	..	..	..	..	223

NOTE—Surveying field work, 4 weeks, beginning April 28th, 1924. See page 269.

For other summer work, see page 222.

All students of the Second Year who have pursued their course of study without serious interference due to personal illness, domestic affliction or urgent affairs, and who fail in more than four subjects of the Second Year, in which standing is determined by sessional examinations, or in three such subjects aggregating over 400 possible marks, shall be required to repeat the Second Year.

II. CHEMICAL ENGINEERING.*

The aim of this course is to prepare students for positions demanding a knowledge of both chemistry and engineering. The duties of a chemical engineer require him to be conversant with chemical processes and the installation of chemical units, and to understand the construction of buildings, the installation and operation of machinery, etc. Accordingly the course of study combines a considerable amount of engineering with the maximum of chemical training which can be attained without overpressure.

Between the Second and Third Years, students taking this course must attend a summer session of four weeks in the chemical laboratories.

In the Third Year specialization commences, the time being divided about equally between chemical and engineering studies, and in the vacation between the Third and Fourth Years all students must give at least six weeks to work in some chemical industry or to equivalent laboratory work satisfactory to the Professor of Chemistry.

In the Fourth Year the engineering studies are completed and the chemical studies which predominate are arranged in two alternative courses, as students cannot possibly study more than a few of the very varied chemical industries. These alternative courses fall broadly under one of two headings:—(*a*) inorganic, (*b*) organic, as indicated in the table below, one or other of which the student shall select. Should a student desire to prepare for an industry which requires more engineering knowledge than is provided in the regular course he may substitute additional engineering subjects for some of the chemical work. Details will be arranged on application to the Faculty through the Professor of Chemistry.

While every effort will be made to supply detailed information as to methods and plan of many of the important industries, and to provide facilities for experimentally carrying out the processes involved, the main aim will be to study the principles which underlie the application of chemistry to economical production.

FIRST AND SECOND YEARS.

As in other Engineering Courses. For details see pages 207 and 208.

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*No student shall be permitted to proceed to the Third Year of this course unless he has secured at least second class standing in the subjects of General Chemistry (51) and Chemistry Laboratory (52).

THIRD YEAR.

SUBJECT	Subject Number	Lectures per week		Laboratory, etc., periods per week		For details see page
		First Term	Second Term	First Term	Second Term	
Crushing and Grinding Mach.	295	2	..	..	..	261
Economics	171	..	2	..	..	249
General Elem. Metall.	262	2	..	..	..	257
Inorg. Quant. Anal. & Lab.	61–62	1	..	3	3	234
Mech. Eng. and Lab.	226 and 228	2	2	1	1	252
Mineralogy	142	2	2	..	..	247
Mineral. Deter.	143	..	..	2	..	247
Organic Chemistry and Lab.	56–57	3	2	..	2	234
Physical Chemistry	58	2	..	..	..	234
Strength of Materials and Lab.	87–88	2	2	..	1	238
Structural Engineering	90	..	1	..	1	239
Summer School, Inorg. Qual. Anal. and Lab.	54 and 55	..	..	..	..	233
Summer Essay or Reading	133	..	..	..	..	224

FOURTH YEAR.

Adv. Inor. Chem.	72	2(a)	2(a)	..	..	237
Adv. Org. Chem. and Lab.	64–65	2(b)	2(b)	4(b)	2(b)	235
Applied Electro-Chem.	70	2	..	..	..	236
*Colloid Chemistry	75	..	2	..	..	237
Elem. of Elec. Eng. and Lab.	111–112	2	2	1	1	244
Engineering Economics	172	2	..	..	..	249
†Engineering Law (alt.)	175	1	1	..	..	249
Fire Assay	273	1(a)	..	1(a)	..	259
Food Chemistry	73	..	1(b)	..	2(b)	235
History of Chemistry	74	..	1	..	..	237
†Hydraulics	100	1	..	½	..	241
Industrial Inorg. Chemistry	68	2	..	..	..	236
Industrial Organic Chem.	69	..	2	..	..	236
Inorganic Laboratory	67	1(a)	..	3(a)	4(a)	236
Metallography	279	..	..	..	1(a)	259
†Military Science (alt.)	400	2	2	..	1	..
Phys. Chem. and Lab.	66	3	3	..	2	235
Summer Essay	134	..	..	..	..	225

*The hours required for laboratory work in this course will be taken from time assigned to subjects 65 or 67.

†Military Science (400) is alternate with Engineering Law (175) and Hydraulics (100)

(a) Inorganic alternative. (b) Organic alternative.

III. CIVIL ENGINEERING.

The courses of study are designed to emphasize the fundamental principles embodied in the study of mechanics, strength of materials, and hydraulics, while at the same time affording an opportunity of applying these principles to practical problems ranging over as wide a portion as possible of the field covered by the practice of civil engineers. A broad and sound foundation is thus laid for future specialization, either in graduate courses or in actual practice. The outlook of the student is further broadened by courses in Mechanical and Electrical Engineering. In the Fourth Year an alternative course is provided for students looking forward to Municipal Engineering or City Management. In the designing courses special attention is given to the interpretation and critical discussion of specifications as well as to the economical principles involved. Students are recommended to obtain as much practical experience as possible during the summer vacations, and are specially recommended to spend at least one season in a drafting office before the final year.

FIRST AND SECOND YEARS.

As in other Engineering Courses. For details, see pages 207 and 208.

THIRD YEAR.

SUBJECT	Subject Number	Lectures per week		Laboratory, etc., periods per week		For details see page
		First Term	Second Term	First Term	Second Term	
Economics	171	..	2	..	..	249
Foundations	89	..	1	..	1	239
Geology, General	141	2	2	⅓	⅓	247
*Highway Engineering (alt.)	85	..	2	..	2	240
Hydraulics and Lab.	97–98	2	1	..	..	240
†Map Projections (alt.)	351	..	..	1	..	268
Mech. Eng. and Lab.	226, 228	2	2	1	1	252
Mechanics	86	2	..	..	..	238
*Railway Eng. (alt.)	92–93	2	2	2	2	239
*Railway Eng. (alt.)	92a, 93a	2	..	2	..	239
†Sanitary Science (alt.)	82	1	..	1	..	240
Strength of Mats. and Lab.	87–88	2	2	..	1	238
Structural Eng.	90	..	1	..	1	239
Surveying	353	2	2	..	..	268
‡Surveying Field Work	354	..	..	..	..	268
Summer Reading or Essay	133	..	..	..	..	224

*Railway Engineering (92, 93) is alternative with Highway Engineering (85) and Railway Engineering (92a, 93a).

†Map Projections (351) is alternative with Sanitary Science (82).

‡For Surveying Field Work (354), see details of Summer Schools, page 222.

FOURTH YEAR.

SUBJECT	Subject Number	Lectures per week		Laboratory, etc., periods per week		For details see page
		First Term	Second Term	First Term	Second Term	
Elements of Elec. Eng. & Lab.	111–112	2	2	1	1	244
Engineering Economics	172	2	..	..	..	249
*Engineering Law	175	1	1	..	..	249
Geodesy and Lab.	359, 360	2	..	1	..	269
†Geodetic Fieldwork	361	..	..	..	..	269
*Military Science	400	2	2	..	1	
Strength of Materials	95	2	1	..	1	241
Theory of Structures	94	1	2	1	2	240
and either						
Bridge Design	96	2	2	2	2	241
*Hydraulic Machines	99	..	2	..	..	241
Municipal Engineering	101	2	2	..	1	242
or						
Bridge Design	96a	2	2	2	1	241
Civic Administration	104	1	..	..	..	242
Waste Disposal	103	1	..	..	..	242
Water Supply and Sewerage	102	..	3	..	2	242
Summer Essay	134	..	..	..	..	225

*Military Science (400) is alternative with Eng. Law (175) and Hydraulic Machines (99).

†For Geodetic Fieldwork (361) see details of Summer Schools, page 222.

IV. ELECTRICAL ENGINEERING.

The electrical studies of the Third Year embrace a consideration of current flow; the principles of electro-magnetism; electrical measurements; the design and performance of electrical machinery.

The Fourth Year is devoted principally to electrical work, and includes lectures and laboratory work on direct and alternating current phenomena, the performance and design of electrical machinery, electric lighting and the various systems of power distribution and transmission, central station design and operation, urban, suburban and interurban railways, hydro-electric power development, electro-chemistry, electro-metallurgy and wireless telegraphy and telephony.

Occasional visits are made to electrical works and power plants.

FIRST AND SECOND YEARS.

As in other Engineering courses. For details, see pages 207 and 208.

THIRD YEAR.

SUBJECT	Subject Number	Lectures per week		Laboratory, etc., periods per week		For details see page
		First Term	Second Term	First Term	Second Term	
Calculus	201	1	1	..	..	250
Economics	171	..	2	..	..	249
Electrical Engineering	113	3	3	..	..	245
Electrical Engin. Lab	114	1	1	2⅔	2⅔	245
Machine Design	225	2	2	..	..	252
Mechanical Drawing	232	..	..	1	1	254
Mech. Eng. and Lab	223, 226	2	2	2	1	253
Mechanics	86	2	..	..	..	242
Mech. of Machines	224	2	2	⅔	⅔	252
Thermodynamics	229	2	2	..	..	253
Strength of Mats. and Lab	87, 88	2	2	..	1	238
Summer Reading or Essay	133	..	..	..	..	224

FOURTH YEAR.

Applications of Electricity	123	1	3	..	..	246
Applied Elec. Chem	70	2	..	..	..	236
Electric Traction	121	..	2	..	..	246
†Electrical Designing	122	2	2	1	1	246
Electrical Engineering	117–118	3	3	3	3	245
Elec. Light & Power Dist	120	2	..	..	..	246
Electrical Photometry and Illumination	124	2	..	..	..	246
Electro-Metallurgy	276	..	2	..	..	259
Engineering Economics	172	2	..	..	..	249
†Engineering Law (alt.)	175	1	1	..	..	249
Hydraulics and Lab	97, 98	2	..	1	..	240
Machine Design	243	..	2	..	..	255
†Military Science (alt.)	400	2	2	..	1	..
Physics and Lab	320, 321	2	2	2	2	267
Summer Essay	134	..	..	..	..	225

†Military Science (400) is alternative with Engineering Law (175) and one lecture hour per week of Electrical Design (122).

For Summer Schools, see page 222.

For the Course in Engineering Physics, see page 221.

V. MECHANICAL ENGINEERING.

Undergraduates entering the Third Year Mechanical Engineering course may elect one of two courses; either that embracing Mechanics of Machines and advanced Thermodynamics or that embracing Accounting, Mill Buildings and Industrial Administration.

The subjects of instruction in this Department are of interest to students who are likely to take up work connected with:—

(*a*) The constructive or manufacturing side of mechanical engineering, including industrial or production engineering; (*b*) steam engineering; (*c*) gas engine and producer work; (*d*) power plant engineering; (*e*) heating and ventilation of buildings and factories; (*f*) aeronautics and aerodynamics.

Courses are given during the Third and Fourth Years in mechanical engineering as applied to questions connected with power installations and prime movers. The earlier portion of this work is supplementary to the instruction given in thermodynamics, mechanics of machines and machine design, and leads up to the more advanced or technical subjects of power plant design, industrial plant design and works organization.

Students in the Department of Mechanical Engineering take systematic work in Electrical Engineering during the Third Year.

Instruction in workshop practice is given in the First, Third and Fourth Years. This work is of a systematic nature, and is intended to prepare for, but by no means to replace, that practical experience of manufacturing operations on a commercial basis which every mechanical engineer must obtain for himself.

The course in thermodynamics deals more particularly with the theory of heat engines, and time is assigned for additional graphical and experimental work in connection with the subject.

Arrangements are made for occasional visits to power plants and manufactories of importance.

FIRST AND SECOND YEARS.

As in other Engineering Courses (see pages 207 and 208), with additional course in May for Second Year (page 222).

THIRD YEAR.

SUBJECT	Subject Number	Lectures per week		Laboratory, etc., periods per week		For details see page
		First Term	Second Term	First Term	Second Term	
*Accounting (alt.)	238	2	2	⅓	⅓	254
Economics	171	..	2	..	..	249
Elements of Elect. Eng. Lab.	111–112	2	2	1	1	244
Industrial Engineering	237	..	2	..	..	254
Machine Design	225	2	2	..	..	252
Mechanical Drawing	231	..	..	2	1	254
Mechanical Eng. and Lab	227, 228	3	3	1	1	253
Mechanics	86	2	..	..	..	238
*Mechanics of Machines (alt.)	224	2	2	⅓	⅓	252
Shopwork	235, 236	..	..	1	1	254
Strength of Mats. and Lab.	87, 88	2	2	..	1	238
Structural Engineering	90	..	1	..	1	239
Thermodynamics	229	2	2	..	..	253
Summer School Shopwork	233, 234	..	..	..	..	254
Summer Reading or Essay	133	..	..	..	..	224

*Alternative with Mechanics of Machines (224); one or other of these subjects must be taken.

FOURTH YEAR.

Designing	241	..	..	1	1	255
Engineering Economics	172	2	..	..	..	249
†Engineering Law (alt.)	175	1	1	..	..	249
Experimental Eng.	257	1	1	..	..	256
Heat and Vent. of Buildings	247	1	1	..	..	255
Hydraulics and Lab	97, 98	2	..	1	..	240
†Hydraulic Mach.	99	..	2	..	..	241
Industrial Administration	254	2	2	1	1	257
**Man. Plant Des. (alt.)	253	..	2	..	..	256
Machine Design	242	2	2	..	⅓	255
Power Plant Design	244	1	1	1	1	255
Mech. Eng. Lab.	249	..	..	3	3	256
Mech. Eng. Lab.	249a	..	..	2	2	256
Mech. of Mach. (alt.)	240	2	2	2⅓	2⅓	255
†Military Science (alt.)	400	2	2	..	1	..
**Mill Buildings	91	2	..	⅓	..	239
Shopwork	252	..	..	1	1	256
*Thermodynamics	251	2	2	..	..	256
Summer Essay	134	..	..	..	..	225

†Military Science (400) is alternative with Engineering Law (175) and Hydraulic Machinery.

**Students electing the Accounting alternate (258) in the Third Year must take these two subjects in the fourth. Mechanics of Machines (240) cannot be taken.

*Industrial Administration (254) alternate with Thermodynamics (251).

Students taking course (254) take course (249a) in Mech. Eng. Laboratory.

VI. METALLURGICAL ENGINEERING.

This course is designed for students intending to enter metallurgical works, such as steel works, smelting or refining plants, foundries, rolling mills, etc., or the metallurgical department of large engineering works.

The course of instruction provides: 1st, a general scientific and engineering education; 2nd, more advanced work in inorganic, physical and electro chemistry and chemical analysis, which are essential for a metallurgist; 3rd, as much mechanical, electrical and hydraulic engineering as time will permit; 4th, a course in the allied subjects of geology, ore deposits and mining; 5th, a full course of instruction in the various branches of metallurgical engineering, including mineralogy, ore-dressing and fire-assaying.

In the Third Year instruction is given in economics, chemistry, physical chemistry, assaying, geology, mineralogy, mining, ore-dressing, metallurgy. and mechanical and structural engineering.

After the Third Year there is a summer school in metallurgical works.

In the Fourth Year instruction is given in chemistry, electrical engineering, law, economics, hydraulics, metallurgy, electro-metallurgy, ore deposits and ore-dressing. Metallurgical designing and laboratory work form important parts of the course.

FIRST AND SECOND YEARS.

As in other Engineering Courses. For details, see pages 207 and 208.

Between the Second and Third Years there is a four weeks' summer school in qualitative analysis in the Chemical Laboratory, beginning about the 1st of May.

THIRD YEAR.

SUBJECT	Subject Number	Lectures per week		Laboratory, etc., periods per week		For details see page
		First Term	Second Term	First Term	Second Term	
Economics	171	..	2	..	..	249
Fire Assaying and Lab	263, 264	..	1	..	2	257
Geology, General	141	2	2	⅓	⅓	247
Gen. Elem. Metall. & Lab	261	2	..	..	½	257
Inorg. Quant. Anal. and Lab	61, 62	1	..	3	..	234
Mech. Eng. and Lab	226, 228	2	2	1	1	252
Metall. Calculations	265	1	..	..	..	258
Mineralogy	142	2	2	..	..	247
Mineralogy, Determinative	143	..	..	2	..	247
Mining Engineering	291	..	2	..	..	260
Ore Dressing and Lab	292	2	2	..	½	260
Physical Chemistry	58	2	..	..	..	234
Strength of Mats. and Lab	87, 88	2	2	..	1	238
Structural Engineering	90	..	1	..	1	239
Summer School, Inorg. Qual. Anal. and Lab	54, 55	..	..	..	..	233
Summer Reading or Essay	133	..	..	..	..	224

FOURTH YEAR.

Applied Electro-Chemistry	70	2	..	..	..	236
Elem. Elec. Eng. and Lab	111, 112	2	2	1	1	244
Electro-Metal and Lab	275	..	2	..	1	259
Engineering Economics	172	2	..	..	..	249
Engineering Law	175	1	1	..	..	249
General Metallurgy	271	2	2	..	..	258
Hydraulics and Lab	100	1	..	½	..	241
‡Industrial Chemistry, Inorg.	68	2	..	..	..	236
Inorganic Lab	67	1	..	3	..	236
Metallurgy and Lab	272, 274	2	2	½	3	258
Metallurgy Colloquium	277	..	1	..	..	259
Metall. Mach. and Design	278	..	..	..	2	259
†Military Science (alt.)	400	2	2	..	1	..
Ore-Dressing and Lab	300, 305	2	..	1	..	261
†Ore Deposits (alt)	148	1	4	..	..	248
*Summer Sch. Metal Works	267	..	..	..	..	258
Summer Essay	134	..	..	..	..	225

‡Applied Electro-Chemistry (70) is alternative with Industrial Chemistry (68).

†Military Science (400) is alternative with Ore Deposits (148).

*Metallurgical summer school (267) is taken at the end of the Third Year.

For Summer Schools, see page 222.

VII. MINING ENGINEERING.

The work of the Third Year is largely in general engineering subjects such as applied mechanics, mechanical engineering, geology, mineralogy and surveying, but courses of special interest to Mining Engineers are introduced in the form of courses in mining, ore-dressing and elementary metallurgy.

The Fourth Year, on the other hand, is very largely given up to technical work in mining, ore-dressing, economic geology and metallurgy, and two alternative lines of study are offered, both including the essential subjects of the Mining Course and leading to the degree. The first alternative (a) offers additional instruction in stratigraphy and petrography, and is intended for men who are especially interested in geology and mining geology. The second (*b*) offers an equivalent amount of special instruction in advanced mining and ore-dressing and permits of a considerable measure of individual specialization in mining subjects.

In both of the above alternatives, the Fourth Year work includes the equivalent of nearly two full days per week in the laboratories and drafting room of the mining department, and in the second term each student is required to prepare a thesis giving the result of an extended individual experimental investigation.

A Field School in mining, ore-dressing and geology is held between the Third and Fourth Years, the work ordinarily beginning immediately after the close of the April examinations. From four to five weeks are spent in travel, during which a number of mines and concentrators are visited and critically studied under the direction of the Departmental staff, and at the end of this Field School summer employment with pay can ordinarily be arranged for all members of the class.

Facilities are also afforded to graduate students who wish to do advanced work in mining or ore-dressing, and the Department possesses three endowed research fellowships open to graduates who show exceptional ability. (See page 263.)

FIRST AND SECOND YEARS.

As in other Engineering Courses. For details, see pages 207 and 208.

THIRD YEAR.

SUBJECT	Subject Number	Lectures per week		Laboratory, etc., periods per week		For details see page
		First Term	Second Term	First Term	Second Term	
Economics	171	..	2	..	..	249
Fire Assaying	263	1	..	2	..	257
Geology, General	141	2	2	1/3	..	247
Inorg. Qual. Anal. and Lab.	59, 60	1	..	2	..	234
Mine Mapping	293	..	..	1	..	261
Mech. Eng. and Lab	226, 228	2	2	1	1	252
Gen. Element. Metall	261	2	..	..	1/2	257
Mineralogy	142	2	2	..	..	247
Mineralogy, Determinative	143	..	..	2	..	247
Mining Engineering	291	..	2	..	..	260
Ore Dressing and Lab	292	2	2	..	1/2	260
Strength of Mats. and Lab	87, 88	2	2	..	1	238
Structural Engineering	90	..	1	..	1	239
Surveying	352	2	..	..	..	268
Surveying Field Work	354	..	..	..	..	268
Summer Reading or Essay	133	..	..	..	..	224

FOURTH YEAR.

Engineering Economics	172	2	..	1/2	1/2	249
Elem. of Elec. Eng. and Lab.	111a	1	1	1/2	1/2	244
Engineering Law (alt.)	175	1.	1.	..	..	249
Geology of Canada	149	1	..	..	..	248
‡Geology, Historical (alt.)	152	1	1	..	1	248
Hydraulics	100	1	..	1/2	..	241
Inorg. Quantitative Anal	71	..	..	4	..	237
Metallurgy, General	271	2	2	..	..	258
†Military Science (alt.)	400	2.	2.	..	1	..
Mining Engineering	297	3	3	..	..	261
Mining Machinery	298	...	2	..	2	261
Mining (Adv.)	299	1	1	1	1	261
Mining Colloquium	301	..	1	..	..	262
Ore Dep. and Econ. Geol	148	1	4.	..	..	248
Ore-Dress., Milling and Lab	300, 305	2	..	1	..	261
Ore-Dress., Lab. and Thesis	306	..	..	..	2 1/2	262
Petrography and Lab	146	1	..	..	1	247
‡Petrography Advanced (alt.)	147	..	..	1	..	248
Mining Field School	294	..	..	..	..	264
Summer Essay	134	..	..	..	..	225

†Students taking Military Science omit the whole of Engineering Law (175) and 12 lectures each, in Mining Machinery (298) and Ore Deposits (148).

‡Omitted by students taking alternative elective (b).

NOTE.—Mining Field work at end of Third Year. See page 264.

Surveying Field work, between the Second and Third Years. See page 269.

COURSE IN ENGINEERING PHYSICS.

There is an increasing demand for men with an advanced knowledge of Mathematics and Physics who are capable of conducting investigations of a research character.

With a suitable training, openings in this field of work may be found in Research Laboratories of the Government and of Electric Corporations, in consulting work and in University appointments.

In view of these facts a course in Engineering Physics leading to the Degree of B.Sc. in Arts has been arranged.

It is open to capable students in Arts or Applied Science.

A student who has completed his Second Year in the Faculty of Applied Science and has received first or second class rank in Mathematics and Physics may join the course in Engineering Physics as outlined below subject to the approval of the Heads of the Departments of Electrical Engineering and Physics

Third Year.

Mathematics 7, 8, 5 (b), (pages 161 and 162).

Physics 5A, 5B, 6B, *or* **8B,** (pages 169 and 170).

Electrical Engineering 113, 114 (see page 245).

During their summer vacation at the end of the Second Year, students must spend three months at an approved shop or radio station.

Fourth Year.

Mathematics 9 *or* **10,** (page 162).

Physics 6A, 7A, 7B, 8A and 6B (*or* **8B**), (page 170).

(Summer Thesis or Shop Work.)

The student may now receive the degree of B.Sc. (Arts), with honours in Mathematics and Physics. In the Fifth Year the student should take the whole of the Fourth Year course for Electrical Engineering, as shown on page 33, and also Physics 9 and 12 *or* 14 (6A has already been taken), and proceed with research work and a thesis with a view to an M.Sc. degree.

The course must therefore cover five years and should cover six. During the last year (the sixth), opportunity would usually be afforded to act as demonstrator with a salary.

SUMMER SCHOOLS.

Undergraduates are required to attend Summer Sessions as specified below. The work is set forth in detail under the subject numbers referred to.

Except as noted, classes will begin on April 28th and will close on May 24th, 1924.

COURSE	Students entering Second Year		Students entering Third Year		Students entering Fourth Year	
	Subject No.	Page	Subject No.	Page	Subject No.	Page
Architecture	347	268	50	232	†50	232
Chemical Engineering	347	268	54, 55	233	...	..
Civil Engineering	347	268	354	268	*361	269
Elect. Engineering	347	268	...	..	...	..
Mechanical Engineering	347	268	233, 234	254	...	..
Metallurgical Engineering	347	268	54, 55	233	267	258
Mining Engineering	347	268	354	268	294	264

†This school will be held in 1923 from 11th September to 26th September, inclusive.

NOTE.—SPECIAL SUMMER SCHOOL.

As it is seldom practicable for students admitted to advanced standing in McGill University from other colleges to attend the May Summer School preceding the work of the year to which they are admitted, the following arrangements have been made for such students, but it must be understood that they only apply to students who have not previously been in attendance in the Faculty of Applied Science.

(a) Students entering the Second Year are required to attend a special Summer School in Surveying which extends from September 17th to 29th, inclusive, preceding the work of the Session. Additional work may be required in the following year if necessary to cover the course.

(b) Students entering the Third Year of the courses in Chemical Engineering and Metallurgical Engineering are required to attend a Special Summer School in Chemistry which extends over a period of four weeks during the month of September preceding the work of the Session.

(c) Students entering the Third Year in the course in Mechanical Engineering should attend a Special Summer School in Shopwork held in September. This School may, however, in certain cases be replaced by other work which has received in advance the approval of the Head of the Department.

(d) Students entering the Third Year in the courses in Civil and Mining Engineering are required to attend a Special Summer School in Surveying from September 17th to 29th, inclusive, and in these courses further work in Surveying is required for a portion of the month of May at the close of the Third Year.

(e) Students entering the Third Year in the course in Electrical Engineering are required to submit evidence satisfactory to the Head of the Department that they have been employed for a time at least equivalent to one month of steady employment, in a first class electrical shop during the vacation preceding their entrance into the Third Year.

(f) Students entering the Third Year or any subsequent year in the course in Architecture must submit evidence satisfactory to the Head of the Department that they have done summer work fully equivalent to the regular scheduled summer work omitted.

(g) Students entering the Fourth Year in the courses in Mining and Metallurgical Engineering are required to submit evidence that they have had practical experience in mining and metallurgical work at least equivalent in extent to the work done in the regular Summer Schools in these courses and should by correspondence in the preceding spring secure the approval of the Head of the Department concerned of the work which they propose to offer in place of the regular summer work.

SUMMER ESSAYS AND SUMMER READING.

SESSION 1923-24

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1. For Students entering the Second Year.

132. All students entering the Second Year, except those in the course in Architecture (see below), will be required to read not less than three books from Group "A" and one book from Group "B" in the following list:—

"A"

Macaulay—Essays on Hampden, Walpole, Pitt, Chatham and Hastings.
No. 225, Everyman's Library. (90c.)
J. M. Dent & Sons, Ltd.

Froude—"Life of Beaconsfield."
No. 666, Everyman's Library. (90c.)

Russell—"Life of Gladstone."
No. 661, Everyman's Library. (90c.)

Withers—"Poverty and Waste."
E. P. Dutton & Co. ($1.25) or Murray (6s.)

Farrand—"The Development of the United States."
Houghton Mifflin Company. ($1.50.)

Parkman—"Montcalm and Wolfe."
Little Brown Company. (2 Vols., $3.50.)

"B"

Thackeray—"Vanity Fair."
No. 298, Everyman's Library. (90c.)

George Eliot—"The Mill on the Floss."
No. 325, Everyman's Library. (90c.)

Stevenson—"Kidnapped."
Cassels, London; Burt, New York. (60c.)

Note.—Wells' "History of the World" (unabridged edition) may be substituted for any three books in the above lists.

Students in the course in Architecture must read the following books:—

Lethaby, W. R.—"Architecture." (Home University Library, W. Briggs, Toronto.)

Lord Lytton—"Last Days of Pompeii."
No. 80, Everyman's Library. (90c.)

Students in the course in Architecture must also either spend five weeks in the office of an architect or contractor, or prepare thirty-five reasonably large freehand sketches in any desired medium.

All students will be required to pass an examination in the summer reading at the opening of the session. A maximum of 100 marks will be allowed for this reading.

2. For Students entering the Third Year.

133. Students entering the Third Year must either

(a) Follow a course of summer reading, *or*

(b) Prepare an essay.

(a) The summer reading required, except in the course in Architecture (see below), is, Ogg—"Economic Development of Modern Europe" ($3.50, Macmillan), on which an examination will be held at the opening of the session. The same number of marks is allotted for this reading as for the essay.

(b) The essay must in all respects follow the specifications laid down for essays submitted by students entering the Fourth Year, except that it may be shorter. All rules and regulations governing the Fourth Year essays, as set forth below, also apply to the Third Year essays. (See Section 3.)

Students in Electrical Engineering or Mechanical Engineering who elect to write an essay and are not engaged during the summer on any engineering, scientific or industrial work which would afford a subject for an essay, may write on one of the following subjects:—

(Electrical Engineering students.)

The application of Electric Power to Industrial Establishments.

(Mechanical Engineering students.)

(1) Oil Fuel for Domestic Heating.
(2) Pulp and Paper Manufacture.
(3) Heavy Oil Engines.

Students in Mining Engineering, or Metallurgical Engineering, who are for any reason unable to write on some engineering work of which they have personal knowledge will be required to take the summer reading (a).

Students in the course in Architecture must either read the following books or submit an essay on a subject approved by the Head of the Department, viz.,

"Memoirs of Benvenuto Cellini."
No. 51, Everyman's Library.

"Art, the Significance of the Fine Arts."
American Institute of Architects,
The Octagon, Washington.

The rules and regulations governing the Fourth and Fifth Years in Architecture also apply to the Third Year essay or reading in this Department. (See Section 3.)

Summer Essays must be handed in at the Dean's Office not later than 5 p.m. on Wednesday, October 10th.

Students in the course in Architecture must also either spend five weeks in the office of an architect or contractor, or prepare thirty-five reasonably large freehand sketches in any desired medium.

3. For Students entering the Fourth and Fifth Years.

134. Students entering the Fourth year, except those in the course in Architecture (see below), are required to prepare an essay during the summer, to be handed in at the Dean's office *not later than 5 p.m. on Wednesday, October 10th.* A maximum of 100 marks, or nearly 10% of the total marks for the year, is given for these essays.

The essays should be from 2,000 to 5,000 words in length in ordinary cases. They should be illustrated by drawings, sketches, and when desirable by photographs, specimens, etc.

No essay compiled from books alone will be accepted unless the student has obtained in advance the written permission of the head of his department to prepare such an essay. Information obtained from books and other sources may, however, be quite properly used or even quoted verbatim, provided full acknowledgment be made and all quotations enclosed in quotation marks. Similarly, drawings, blue prints, etc., may be included in the essay, provided full and complete acknowledgment is made.

The *most acceptable subject for an essay* is a critical description of the work on which the student is engaged during the summer, but a description of any engineering, scientific, or industrial work with which he is familiar will be accepted.

Students in Electrical Engineering, or Mechanical Engineering, who are not directly connected with any such work, may write on one of the following subjects:—

(Electrical Engineering students.)

(1) Generation of Electric Power.
(2) Long Distance Power Transmission.
(3) Distribution of Electric Power.
(4) Substitution of Electricity for Steam on Railroads.

(Mechanical Engineering students.)

(1) Power Costs.
(2) Central Station Heating.
(3) Methods of Increasing Production in Manufacturing.
(4) Exhaust Steam Turbines using Steam at Pressures below Atmospheric.

The essays must be well expressed, and written in precise, well chosen, grammatical English. In judging the value of the essays, account will be taken not only of the subject matter, but also of style and literary construction.

All essays when handed in will become the property of the department concerned and will be filed for reference. Students are, however, permitted to submit duplicate copies of their essays in competition for the students' prizes of the Engineering Institute of Canada, or of the Canadian Institute of Mining and Metallurgy.

The essays must be written on paper of substantial quality and of a size approximately 8½ x 11 inches.

Students in the course in Architecture must either read the following books, or submit an essay on a subject approved by the Head of the Department, viz.,

(Fourth Year).

"Memoirs of Benvenuto Cellini."
No. 51, Everyman's Library.

"Art, the Significance of the Fine Arts."
American Institute of Architects,
The Octagon, Washington.

(Fifth Year).

"Art, the Significance of the Fine Arts."
American Institute of Architects,
The Octagon, Washington.

Thackeray, W. M.—"History of Henry Esmond."
Everyman's Library. (90c.)

Students who take the Reading will be required to pass an examination in the same at the opening of the session. The same number of marks will be allotted for this reading as for the essay.

Summer Essays must be handed in at the Dean's Office not later than 5 p.m. on Wednesday, October 10th.

In addition to this reading, or essay, students in the course in Architecture must either spend five weeks in the office of an architect or contractor, or prepare thirty-five reasonably large freehand sketches in any desired medium.

SUBJECTS OF INSTRUCTION.

The following courses are subject to such modifications during the year as the Faculty may deem advisable.

DEPARTMENT OF ARCHITECTURE.

PROFESSORS:—{RAMSAY TRAQUAIR (in charge of Department).
PERCY E. NOBBS (in charge of Design).
ASSISTANT PROFESSOR:—W. E. CARLESS.
SPECIAL INSTRUCTOR:—E. DYONNET.
SPECIAL LECTURERS.—{P. J. TURNER.
LESSLIE R. THOMSON.

A.—Design.

The course in Design is divided into four classes (A, B, C and D), intended to be taken in the Second, Third, Fourth and Fifth Years respectively. Advanced or backward students may be allotted to design classes to suit their individual requirements irrespective of their standing in other subjects, but good standing in Class D must be obtained prior to receiving the degree.

1. CLASS A. Simple problems in composition of a monumental nature, not involving difficulties of plan.

2. CLASS B. The design of domestic and small public buildings.

3. CLASS C. The design of public buildings.

4. CLASS D. Problems involving the plan, structure and lay-out of complex buildings and groups of buildings. The diploma design for graduation is done in the second term.—Prof. Nobbs.

B.—Aesthetic.

The theoretical courses are intended to develop a sense of critical judgment in the student, emphasizing the fundamental principles of composition and design.

5. THE ELEMENTS OF ARCHITECTURE (24 lectures).

The five orders of Vignola, pedestals, pediments, intercolumniation and superposition of orders, arches, vaults, domes, roofs, openings, etc.—Mr. Carless.

6. THE ELEMENTS OF COMPOSITION (24 lectures).

Analogies in the arts; principles of composition, mass unity, balance, character, scale, proportion; symmetric and asymmetric grouping; vertical

and horizontal treatments; composition in plan, natural and axial; appreciation of intrinsic qualities of materials, values of textures, etc.—Mr. Carless.

7. THEORY OF DESIGN (24 lectures).

(a) *Aesthetic:*—The history of aesthetic enquiry, perception, emotion, pleasure, pain and expression; the art impulse, beauty defined, the work of art; the three elements—subject, emotional content and medium; the criteria.

(b) *Aesthetic practice:*—Pure design—the function of ornament, the moral logic of "motif," the material logic of treatment, the placing and classification of ornament; the evolution of functional forms, analysis of conventional forms; the use of scale and proportion; corrections and refinements.

Students will read selected passages from the works of G. Santayana, Yrjö Horn, Benedetto Croce, Marshall, Geoffrey Scott, Baldwin Brown and R. Blomfield.—Prof. Nobbs.

8. THEORY OF PLANNING (24 lectures).

(a) *Elements of Planning:*—Dimensions, arrangements, scales, aspect, prospect, light, the structural bay, unit planning, axial planning.

(b) *Domestic Planning:*—Stables, cottages, housing, residences; country houses and gardens; apartment houses.

(c) *Public Buildings:*—Churches, halls, theatres, schools, libraries, hospitals, baths, fire stations, municipal buildings, etc.

Note:—The examples studied are selected from current architecture.—Prof. Nobbs.

Courses 7 and 8 will be taken in alternate years until further notice.

ORNAMENT AND DECORATION (48 lectures and 48 drafting periods), 9, 10, 11 and 12.

9. DECORATIVE HERALDRY. The place of heraldry in the arts; the laws of heraldry, heraldic art of different periods; modern practice and tendencies; symbolism and significant ornament.—Prof. Traquair.

Text-book:—Decorative Heraldry, Eve. *Reference:*—The Art of Heraldry, Fox Davies.

10. ORNAMENT IN FORM. The design of plaster work, terra cotta, stone carving, architectural sculpture, wood carving and furniture is dealt with as the evolution of form in distinctive materials, influenced incidentally by the prevailing taste of different periods.—Prof. Traquair.

Reference Books:—Plastering, Plain and Decorative, Millar; The Art of the Plasterer, Bankart; Mediæval Figure Sculpture in England, Prior.

11. METAL WORK. The design of wrought and cast iron, bronze, copper, brass, pewter, silver, gold and jewellery is dealt with historically and as the results of the methods of workmanship.—Prof. Traquair.

Reference Books:—English and Scottish Wrought Iron Work, Murphy; Ironwork, Starkie Gardner; Leadwork, Lethaby.

12. COLOR DECORATION. Stained glass, mosaic of various kinds, inlays, the use of colored materials in external and internal design, mural decoration, and the analysis and construction of pattern.—Prof. Traquair.

Reference Books:—Vitraux, Merson; Windows, Day.

C.—History.

13. GENERAL HISTORY. Mediæval and Modern Europe (75 lectures). For particulars of this course, see page 159.

14. ANCIENT AND CLASSIC ARCHITECTURE (48 lectures).

The architecture of the ancient Egyptians, Chaldæans, Assyrians and Persians; the Minoan civilization; architecture of the Dorian and Ionian Greeks, with special attention to the refinement of form in Hellenic art; the architecture of Rome and Byzantium to the fall of the Byzantine Empire.—Prof. Traquair.

Text-books:—Banister Fletcher's History of Architecture; Anderson and Spier's Architecture of Greece and Rome.

15. MEDIÆVAL ARCHITECTURE (48 lectures).

The rise of the Romanesque schools, from the decline of the Western Roman Empire to the XI century; the evolution of ecclesiastical architecture in France and England to 1500 A.D.; the Gothic schools of Europe and the evolution of military and civil architecture.—Prof. Traquair.

Text-book:—Power's Mediæval Architecture.

16. RENAISSANCE ARCHITECTURE (48 lectures).

The beginning of the Renaissance in Italy and its influence on architecture from 1400 A.D. to 1600 A.D.; the Renaissance in France from Francis I to the Revolution; the earlier and later phases of the Renaissance in England and English architecture during the XVIII century.—Prof. Traquair.

Text-books:—Anderson's Italian Renaissance Architecture; W. H. Ward's French Renaissance Architecture; R. Blomfield's Short History of Renaissance Architecture in England.

17. MODERN ARCHITECTURE (48 lectures).

The end of the Renaissance and the classic revival in England; scholarly architecture; the "Gothic Revival" in England; the influence of Pugin,

Ruskin and Morris; the "Arts and Crafts" movement; the eclectic schools; Shaw and the free classicists; the progress of art in Europe during the XIX century; the classic schools and "official" architecture; the neo-grec movement in France; the national revivals, the secession and art nouveau; the colonial architecture of North America, Spanish, French and English; the modern schools and the present position.—Prof. Traquair.

D.—Science.

MATHEMATICS 192, 193, 194. Algebra (for the first term only). Trigonometry and Mechanics. For full particulars, see pages 249 and 250.

44 and 45. PHYSICS AND LABORATORY (48 lectures and 24 periods).

The instruction includes a fully illustrated course of experimental lectures on the general principles of physics, embracing the laws of energy, heat, light, electricity and sound.—Dr. Eve.

346, 347 and 348. SURVEYING. (Full course: 4 weeks field school, 48 lectures and 24 draughting periods, see page 268).

22 and 23. HYGIENE OF BUILDINGS (24 lectures in first term, 12 lectures and working out of one graphical problem in second term).

22. Light and air, water, sanitary plumbing, sewage disposal. First term.—Dr. Starkey.

23. The heating and ventilation of buildings. Second term.—Prof. McKergow.

E.—Construction.

The Second Year work covers the ordinary building trades and detailing where calculations of a complicated kind are not involved. The Third Year work deals with structural problems involving calculation, while in the Fourth Year problems in structural design are worked out.

24 and 25. BUILDING CONSTRUCTION AND BUILDING DETAIL (24 lectures, 48 draughting periods).

Building materials, brickwork, masonry, carpentry, roofing, etc.; joinery of doors, windows, etc., and the finishing trades, such as plastering, painting and plumbing; underpinning, shoring, centering and forms. General working drawings are prepared, and building works in progress are visited.—Mr. Turner.

26 and 27. ARCHITECTURAL ENGINEERING I and ARCHITECTURAL ENGINEERING (Draughting) I (48 lectures and 24 draughting periods). Graphical methods of calculating and the strength of materials employed in construction.—Mr. Thomson.

28 and 29. ARCHITECTURAL ENGINEERING II A AND ARCHITECTURAL ENGINEERING (Draughting) II A (24 lectures and 48 draughting periods).

Theory and practice of reinforced concrete; foundations and retaining walls.—Mr. Thomson.

30 and 31. ARCHITECTURAL ENGINEERING II B and ARCHITECTURAL ENGINEERING (Draughting) II B (24 lectures and 48 draughting periods).

Rivets and riveting, symmetrical and eccentric connections; the design of structural steel, with examples of floors, columns, beams, office buildings and plate girders; the theory of arches in masonry and in steel. —Mr. Thomson.

Architectural Engineering II A, and Architectural Engineering II B, with the draughting periods allotted to each, will be taken until further notice by the Third and Fourth Years together, and are given in alternate years.

F.—Architectural Practice.

131. ENGLISH COMPOSITION (24 lectures with exercises).

Instruction is provided with the Applied Science First Year classes. (See page 230)—Prof. Latham.

32. PROFESSIONAL PRACTICE (24 lectures with exercises).

Structure of specifications and general clauses; specifications for all trades; conditions of contract; agreements; building by-laws; estimates; reports; professional ethics.—Mr. Turner.

175. ENGINEERING LAW (24 lectures).

Instruction is provided with the Applied Science Fourth Year classes (see page 249).

G.—Drawing.

33, 34, 35, and 36, ARCHITECTURAL DRAWING (84 periods of three and four hours).

The work in this course is in direct connection with the lectures in History of Architecture.

33. Drawings of the Classic orders, showing their application to other elements in architectural design, are prepared from the large models in the museum and from documents.—Mr. Carless.

34. Drawing of the Greek orders are prepared with special reference to their structural development and design. Classic buildings are studied from documents in connection with the lectures on Classic Architecture. —Prof. Traquair.

35. In connection with the lectures on Mediæval Architecture, sketch plans, elevations and details of important mediæval buildings are set up from documents.—Prof. Traquair.

36. In connection with the lectures on the Architecture of the Renaissance, important buildings are studied by drawing and sketching.—Prof. Traquair.

37. HISTORICAL DRAWING. The advance study of one or more historical buildings by means of large scale drawings.—Prof. Traquair.

38, 39, 40, 41. FREEHAND DRAWING (48 periods).

Drawing in pencil or charcoal from casts of architectural ornament, architectural fragments and parts of the figure.—Mr. Dyonnet.

18. ARCHITECTURAL GEOMETRY I (24 lectures and 24 periods).

Descriptive geometry; isometric and axometric projection; shades and shadows; developed surfaces and intersection of solids.—Mr Carless.

19. ARCHITECTURAL GEOMETRY II (24 lectures and 24 periods).

The practical application of descriptive geometry to masonry and joinery; perspective; the rendering of perspective drawings.—Mr. Carless.

42 and 43. MODELLING (one period a week of two hours, extended over the Fourth and Fifth Years).

The student first studies form directly from nature, and later on conventionalizes the forms with which he has become familiar for decorative purposes. The Architectural museum affords many examples from different periods of the adaptation and abstraction of natural motifs in ornament. They are used to show the spirit in which to work out ornament, and are not copied directly. Models of design on which the students are engaged are also prepared, and casting is taught.—Mr. Dyonnet.

46, 47, 48, 49. An essay on an historical or theoretical subject is required from all students excepting those of the First Year. This essay is to be prepared during the session.

50. SUMMER WORK.

A, B & C. During the vacation following the close of the First, Second and Third Years, the students in Architecture are required to read and be prepared to pass an examination on a selected theoretical, æsthetical, or historical architectural work, and in addition to this, to spend at least five weeks in the office of some architect or contractor; the period of such employment to be certified by a letter from the employer. Students who for any reason approved by the Head of the Department find it impracticable to do office work, may submit thirty-five reasonably large free-hand sketches, rendered in any desired medium as an equivalent.

D & E. A summer school in sketching and measuring is attended by all students between the Second and Third and between the Third and Fourth Years, in the latter part of September, for the study of buildings in Canada and in the United States.

For summer reading, see page 223.

DEPARTMENT OF CHEMISTRY.

DIRECTOR:—R. F. RUTTAN.

PROFESSOR OF INORGANIC CHEMISTRY:—F. M. G. JOHNSON.

ASSOCIATE PROFESSORS:—NEVIL NORTON EVANS. OTTO MAASS. G. S. WHITBY.

ASSISTANT PROFESSORS:—A. R. M. MCLEAN. H. W. HATCHER.

DEMONSTRATORS:—J. DOLID. DOROTHY CHARLTON. L. J. WALDBAUER. W. W. THOMSON. A. CAMBRON. G. W. HOLDEN. P. LAROSE. J. W. MCKINNEY. R. S. JANE.

Second Year Lectures.

51. GENERAL CHEMISTRY. The course includes the history, occurrence, properties and methods of preparation of the most important elements and compounds, with their industrial applications; classification; general laws and principles; and the fundamental theories of the science; together with a brief discussion of scientific method. Three hours a week for all students in Engineering.—Prof. Evans.

Text-books:—Macpherson and Henderson, General Chemistry.

54. INORGANIC QUALITATIVE ANALYSIS. A course dealing with the principles of analytical chemistry—nature of solutions, precipitation, etc., explanatory of the work done in the laboratory (course 55). Five lectures a week for the first three weeks of the summer session.—Professor Evans.

Text-book:—N. N. Evans, Notes on the Theory of Qualitative Analysis.
Reference:—Stieglitz, Qualitative Chemical Analysis.

Second Year Laboratory.

52. GENERAL CHEMISTRY LABORATORY. Practical work designed to accompany and illustrate the lectures of course 51. The course includes the construction and use of ordinary apparatus, the preparation and study of important elements and compounds, qualitative analysis, and simple quantitative determinations, both gravimetric and volumetric, including combining weights, standardization of solutions, hardness of water, etc.

One period for all students of Engineering.—Professor Evans and Messrs. Wright and Shaw.

55. INORGANIC QUALITATIVE ANALYSIS LABORATORY.

A course of laboratory work, including preliminary experiments on known substances, the examination of unknown mixtures for base and acid radicals, methods of bringing substances into solution, and a study of the chemical reaction involved in these processes. Four weeks in the Summer School for students of the Chemical and Metallurgical Engineering courses. —Professor Evans and Miss Charlton and Mr. Cambron.

Text-book:—W. A. Noyes, Qualitative Analysis.

Third Year Lectures.

56. ORGANIC CHEMISTRY. (Arts 2.) A course in general elementary organic chemistry. Three lectures a week during the first term and two during the second term.—Dr. Ruttan.

Text-books:—Perkin and Kipping's *or* Remsen's Organic Chemistry.

58. PHYSICAL CHEMISTRY. (Arts 4.) An introductory course following the development of chemical theory, including vapour densities, molecular weights, the mass law and the phase rule.

Two lectures a week during the first term.—Dr. Maass.

Text-book:—Theoretical and Physical Chemistry, Bigelow.

59. INORGANIC QUALITATIVE ANALYSIS. A course explanatory of the work done in the laboratory. One lecture a week in the first term for Mining Engineers only.—Professor Evans.

Text-book:—N. N. Evans, Notes on the Theory of Qualitative Analysis.

61. INORGANIC QUANTITATIVE ANALYSIS. A course on the general principles involved in quantitative analysis. One lecture a week during the first term of the Third Year.—Dr. Johnson.

Text-book:—Cumming and Kay. *For reference:*—Treadwell's Quantitative Analysis.

Third Year Laboratory.

57. ORGANIC CHEMISTRY. (Arts 2.) A course on the preparation, detection and analysis of the commoner organic compounds. Two periods a week, in the second term.—Drs. McLean and Whitby, with Messrs. Dolid and Cambron.

Text-book:—Norris' Experimental Organic.

60. INORGANIC QUALITATIVE ANALYSIS. A course adapted to the requirements of Mining Engineers. Two periods a week in the first term. Professor Evans with Mr. A. Cambron and Miss Charlton.

Text-book:—W. A. Noyes, Qualitative Analysis.

62. INORGANIC QUANTITATIVE ANALYSIS. (Arts 8.) An extensive course on gravimetric and volumetric method. Three periods per week for Chemical Engineers (Course II).—Dr. Johnson and Messrs. P. Larose and R. S. Jane.

Text-book:—Cunningham and Kay, Quantitative Analysis.

Fourth Year Lectures and Laboratory.

73. FOOD CHEMISTRY. (Arts 13.) A course on the constitution and analysis of proteins, carbohydrates, fats and allied substances. The course also includes the estimation of food values, enzyme action. A course of one lecture per week and two laboratory periods during the second term. The laboratory work comprises the study of typical foodstuffs, enzyme action and includes the use of the calorimeter, polariscope and refractometer in organic analysis.—Dr. Ruttan, Dr. Whitby, Dr. MacLean, Mr. Dolid and Mr. A. Cambron.

Text-book:—Woodman's Food Analysis.

64. ADVANCED ORGANIC CHEMISTRY. (Arts 5.) The lectures will deal with the more complicated classes of carbon compounds, such as the carbohydrates, terpenes and alkaloids; the more complicated types of reaction, such as the Grignard reaction, the Claisen reaction, the reaction of aliphatic and hydroaromatic diketones; various theoretical conceptions such as geometrical isomerism, partial valency, the strain theory. Two lectures per week.—Dr. Whitby.

Text-book:—Perkin and Kipping's Organic Chemistry and Moureu's Organic Chemistry. *For reference:*—Recent Advances in Organic Chemistry, Stewart; Advanced Organic Chemistry, Cohen; Organic Chemistry of Nitrogen, Sidgewick.

65. ADVANCED ORGANIC LABORATORY. (Arts 5.) The course will comprise the preparation of a number of representative organic compounds of a more complicated nature than those prepared in the Third Year, including dyes, nitro derivatives and examples of reactions, such as Perkin's, Friedel and Craft's, Skraup's and Grignard's. It will also comprise the quantitative determination of the elements and of typical groups in organic compounds; and also the identification of unknown organic substances. Four periods a week in the first term and two in the second.—Drs. Whitby and MacLean and Messrs. Dolid, A. Cambron and J. W. McKinney.

The student is required during this course to take a complete course in gas analysis under Dr. Johnson.

66. PHYSICAL CHEMISTRY. (Arts 7.) Two lectures a week on general physical chemistry, including the kinetic theory, thermo-chemistry, electron theory in chemistry, chemistry of radioactive substances, etc.

Students will be required to work problems dealing with the subject matter of the lectures.

Two laboratory periods a week in the second term are devoted to typical physico-chemical measurements and methods of analysis. —Dr. Maass, and Mr. Waldbauer.

Text-books:—Washburn's Principles of Physical Chemistry; Findlay's Physico Chemical Measurements.

For reference:—Ramsay's Text-books of Physical Chemistry.

67. INORGANIC LABORATORY. (Arts 8.) The lectures deal with the special methods of analysis of iron and steel, alloys and water. One lecture and three periods a week in the first term and four periods in the second. —Dr. Johnson and Messrs. Larose, Cambron and Jane.

The laboratory work is a continuation of courses 61 and 62. A course in gas analysis is given in the second term, as well as studies in colloid chemistry and some advanced inorganic preparations.

For reference:—Lord and Demorest, Quantitative Analysis; Treadwell's Quantitative Analysis; Blair, Chemical Analysis of Iron; Ibbotson, Analysis of Steel Works Materials.

68. INDUSTRIAL CHEMISTRY, INORGANIC. (Arts 14.) A course, both theoretical and descriptive, on the more important inorganic chemical industries. Two lectures per week in the first term. Special lectures are given in this course by chemical engineers from outside the University.—Dr. Johnson.

69. INDUSTRIAL CHEMISTRY, ORGANIC. (Arts 15.) This course is given during the second half of the session, and includes the chemistry of paper and pulp, sugar, starch and glucose, soap and fats, distillation of wood and the purification of the products, etc. Two lectures per week in the second term. This course is given by Dr. Johnson, with special lectures by chemical engineers from the city and district who are specialists in one or other of the industries.

70. APPLIED ELECTRO-CHEMISTRY. (Arts 12.) The laws of electrolysis and of solutions are studied from the standpoint of the osmotic theory. Primary and secondary batteries, electro-plating, polarisation and the preparation and electro-chemical behaviour of the rarer elements used in incandescent lamps are discussed. The more important technical processes are studied and typical substances prepared in the laboratory. Two lectures in the first term.—Dr. Maass.

For reference:—Allmond, Applied Electro-chemistry; Blount, Practical Electro-chemistry.

71. INORGANIC QUANTITATIVE ANALYSIS. A laboratory course specially designed for Mining Engineers. Four periods a week in the first term.—Dr. Johnson and Mr. Larose.

Text-book:—Lord and Demorest, Quantitative Analysis. *For reference:*—Olsen's Quantitative Analysis.

72. ADVANCED INORGANIC CHEMISTRY. (Arts 6.) A course of lectures on inorganic chemistry, discussing the elements and their compounds in accordance with the general principles of physical chemistry.

Two lectures a week throughout the session.—Dr. Johnson.

74. HISTORY OF CHEMISTRY. (Arts 9.) A short course dealing with the development of chemistry from the historical standpoint. One lecture a week in the second term.—Dr. Maass.

75. COLLOID CHEMISTRY. (Arts 16.) Two lectures per week and a total of ten laboratory periods in second term.—Dr. Johnson.

DEPARTMENT OF CIVIL ENGINEERING AND APPLIED MECHANICS.

PROFESSORS:—H. M. MACKAY. E. BROWN. R. DE L. FRENCH.

ASSOCIATE PROFESSORS:—C. BATHO. H. M. LAMB.

LECTURERS:—G. J. DODD. R. E. JAMIESON.

ASSISTANT IN CHARGE OF TESTING LABORATORY:—S. D. MACNAB.

DEMONSTRATOR:—R. S. EADIE.

Second Year.

81. MATERIALS OF CONSTRUCTION. Manufacture and properties of cast iron, wrought iron, crucible, bessemer and open hearth steel; principal alloys; considerations governing selections of materials; manufacture and properties of Portland and natural cements; limes; concrete; stone and brick masonry; principal kinds of timber used for engineering purposes; preservation of timber; discussion of standard specifications.

Required of all engineering students. One hour per week.—Prof. Mackay and Mr. Sproule.

Text-book:—Moore, Materials of Engineering.

83. MECHANICS. The general principles of statics and of the dynamics of a particle are developed in the lectures, and numerous examples illustrating the application of mechanics to engineering problems are worked out.

The course includes equilibrium of forces; friction; force and funicular polygons; bending moment and shear; forces in framed structures; hydrostatics; relative velocity; variable motion (straight line and curvilinear); simple harmonic motion; pendulums, springs; inertia forces in machines; crank effort curves; flywheels, etc.

The mathematical courses in calculus are taken concurrently and calculus methods are used freely. Four hours per week.—Prof. Brown, Dr. Batho, Prof. Lamb and Mr. Jamieson.

Reference books:—Morley, Mechanics for Engineers; Poorman, Applied Mechanics.

Third Year.

86. MECHANICS. The work of the Second Year course in mechanics is extended, and the dynamical equations for the motion of a rigid body in two dimensions are deduced. Numerous examples are worked in detail, including problems on fly-wheels, kinetic energy of bodies having translation and rotation, oscillation of a rigid body about a fixed axis, impulse, etc. The elementary principles of the gyroscope are considered. Two lectures per week, first term.—Prof. Brown and Dr. Batho.

Reference book:—Worthington, Dynamics of Rotation.

87. STRENGTH OF MATERIALS. This course deals with the fundamental principles of the strength of materials. It includes the following:—Stress, strain, resilience, and the elastic properties of materials used in construction; bending moment and shearing force diagrams; strength, curvature, and deflection of beams; continuous beams; cantilever beams and the like; simple problems on rolling loads; reinforced concrete beams; the strength of shafting; spiral springs; columns; bending combined with tension or compression; elementary consideration of compound stresses; distribution of shearing stress on various sections, etc.

Required of all Engineering students. Two lectures per week during the session.—Professors Brown, Batho and Lamb.

Text-book:—Morley, Strength of Materials.

88. STRENGTH OF MATERIALS LABORATORY. The work illustrates the principles of the lecture course in strength of materials (87), and includes the following:—Tension tests of various materials; stress-strain diagrams by automatic recorders and by extensometers and scales; deflection of beams, torsion of shafts; experiments on spiral springs and torsional oscillations of wires; the moment of inertia of fly-wheels; determination of Young's modulus; test of Portland cement; demonstrations on the large testing machines on the breaking of timber and reinforced concrete beams and small columns, the compressive strength of concrete, bricks, mortars, etc. Three hours per week, second term.—Prof. Brown, Dr. Batho, Mr. Jamieson, Mr. Eadie.

89. FOUNDATIONS AND MASONRY. Borings; bearing power of soils; piles and pile driving; concrete piles; footings; grillages, underpinning; foundations under water, cofferdam, open dredging, pneumatic and freezing processes; estimation of quantities from drawings; estimates of costs.

Required of Civil Engineering students. Four hours per week, second term.—Prof. Mackay, Mr. Dodd.

Text-book:—Foundations of Bridges and Buildings, Jacoby and Davis.

90. STRUCTURAL ENGINEERING. Problems in the design of beams, plate girders, columns, roof trusses, knee bracing, etc.; working drawings; reinforced concrete; estimates of quantities; estimates of cost. Required of students in Courses II, III, V, VI and VII. Four hours per week, second term.—Prof. Lamb and Mr. Jamieson.

Reference books:—Ketchum's Structural Engineer's Handbook; Ketchum's Mill Buildings, Bishop's Structural Drafting and Design of Details; Carnegie, Pocket Companion.

91. MILL BUILDINGS. The design and construction of mill buildings; purpose and arrangement of plant, layout of buildings, loads; steel framed buildings, design of roof-trusses, beams and columns, details and shop-drawings; reinforced concrete buildings, design of slabs, beams and columns, types of reinforcement, forms, methods of construction, estimate of quantities and of costs; wood framed buildings; foundations, steel grillages, reinforced concrete spread foundations.

Required of Fourth Year Mechanical Engineering students.—Prof. Lamb.

Reference books:—Ketchum, Steel Mill Buildings; Tyrell, Mill Buildings; Hool, Reinforced Concrete Construction.

92. RAILWAY ENGINEERING. The locomotive and its work; locomotive and grade problems; effect of distance, rise and fall and curvature on train mile costs; estimate of probable receipts and expenditures; economics of location, reconnaissance, preliminary, and location surveys; turnouts, yards and terminals; details of construction; materials of construction. Required of Civil Engineering students. Two hours per week. —Prof. Lamb.

92a. RAILWAY ENGINEERING. A briefer course than the above required of students taking Highway Engineering, and alternative with 92. Two hours per week, first term.—Prof. Lamb.

93. RAILWAY ENGINEERING. The paper location of a railway, map, profile, earthwork, mass diagram, overhaul, velocity profile, bill of material and cost estimate of same; the design of a freight yard, detailing of switches and complicated lay-outs and bill of track material. Required of Civil Engineering students. Six hours per week.—Prof. Lamb.

93a. RAILWAY ENGINEERING. A briefer course than the above. Required of students taking Highway Engineering, and alternative with 93. Six hours per week, first term.—Prof. Lamb.

97. HYDRAULICS. The fundamental principles of hydraulics are considered and applied to problems on the discharge of orifices, notches, weirs, pipes and open channels under varying conditions. The theory of impact of jets and its application to turbines is also dealt with. Required of Civil Engineering students in the Third Year and of Mechanical and Electrical Engineering students of the Fourth Year. Two hours per week, first term.—Prof. Brown.

Text-book:—Hydraulics and Its Applications, Gibson.

98. HYDRAULIC LABORATORY. The course is illustrative of the principles considered in course 97, and is taken concurrently. The work includes the following experiments:—Measurement of discharge from orifices, notches and pipes, both straight and bent, to determine hydraulic coefficients; pressure of jets impinging on vanes; tests of Venturi meter, hydraulic ram, Pelton wheel, Girad impulse turbine, etc. Three hours per week, first term.—Prof. Brown, Dr. Batho and staff.

82. SANITARY SCIENCE. Basic principles of sanitation underlying the design of works for water supply, sewerage, the heating, lighting and ventilation of buildings, etc. Alternative with Map Projections 351. Four hours per week, first term.—Dr. Starkey.

85. HIGHWAY ENGINEERING. Vehicular traffic and its requirements; methods of financing; economics of location; surveys; distance, grade and curvature; drainage; earthwork; paving materials, manufacture and use; maintenance; bridges, culverts, sidewalks and other accessories; designs and estimates. Alternative with 92. Eight hours per week, second term. Prof. French.

Text-book:—Agg's Construction of Roads and Pavements.

Fourth Year.

94. THEORY OF STRUCTURES. The analysis of statically determinate framed structures under fixed and moving loads; distortion of framed structures; swing spans; braced arches and arched ribs with two and three hinges; hingeless arches in concrete and reinforced concrete; frames with redundant members.

Required of Civil Engineering students. Four hours per week, first term; eight hours per week, second term.—Prof. Mackay, Mr. Jamieson.

Reference books:—Johnson, Bryan and Turneaure's Modern Framed Structures; Marburg, Stresses in Structures.

95. Strength of Materials. The course includes the following:—The bending and deflection of beams loaded and supported in any manner; deflection due to shear; principle of work applied to deflection of beams, and statically indeterminate problems; bending of curved bars, and of unsymmetrical sections; elastic strains; relation between elastic constants; strength of thick shells; earthwork theories; the design of floor and column systems for reinforced concrete buildings (including a critical study of standard specifications); retaining walls, etc.

Required of Civil Engineering students. Two lectures per week during the first term, and one per week during second term, with the equivalent of one-half laboratory period per week throughout the session at times appropriate to the progress of the course.—Prof. Brown.

Text-books:—Strength of Materials, Morley; Reinforced Concrete, Taylor and Thompson, or Reinforced Concrete Construction, Vols. II and III, Hool, or Reinforced Concrete Handbook, Hool and Johnson.

96. Bridge Design. The reason governing the selection of a particular type of bridge; discussion of the loads to which the bridge will be subjected; calculation of the stress in the several members; determination of the sectional areas and forms of the members; design of the connections; preparation of complete drawings.

Required of students in Civil Engineering. Eight hours per week. —Prof. Mackay and Mr. Dodd.

Reference books:—Kirkham's Structural Engineering; Ketchum's Structural Engineer's Handbook; Waddell's Bridge Engineering.

96a. Bridge Design. A slightly briefer course than 96. Required of students taking the Municipal alternative.—Prof. Mackay and Mr. Dodd.

99. Hydraulic Machines. The course deals mainly with the development of the modern turbine and centrifugal pump and includes the following general topics:—Application of the principles of hydraulics in explanation of the functions of the various parts of the machines; special problems encountered under different conditions; characteristics of different types and method of interpreting results of tests on small models; essential features and mechanical details of typical turbines and pumps; principal hydraulic formulæ underlying design; the hydraulic accumulator; inertia effects in reciprocating machines, etc. Two hours per week, second term.—Prof. Brown.

Reference books:—Hydraulics and Its Applications, Gibson; Water Power Engineering, Mead; Proceedings of Engineering Societies.

100. Hydraulics and Laboratory. A short course embodying the hydraulic principles outlined under courses 97 and 98 will be given in

the first term. There will be one lecture per week, and six or more laboratory periods at hours to be arranged. Required of Mining, Metallurgical and Chemical Engineering students of the Fourth Year.—Dr. Batho.

Text-book:—Hydraulics, King and Wisler.

101. MUNICIPAL ENGINEERING. Fundamental principles of water supply, sewerage, sewage disposal, highway engineering and the treatment of garbage and rubbish. Required of Civil Engineering students not taking Municipal alternative. Two hours per week, first term, and five hours per week, second term.—Prof. French.

Text-books:—Turneaure and Russell's Public Water Supplies; Metcalf and Eddy's Sewerage and Sewage Disposal.

102. WATER SUPPLY AND SEWERAGE.

(a.) *Water Supply.* Quantity, quality and pressure; rainfall and evaporation; run-off, pumping machinery; storage; dams, aqueducts, distribution systems, etc.; appurtenances; purification systems; fire service; construction materials and methods; designs and estimates.

(b.) *Sewerage.* Quantity of sanitary sewage and of storm water; sewerage mains and appurtenances; construction methods and materials; designs and estimates.

(c.) *Sewage Disposal.* Characteristics of sewage; disposal by dilution; screening and sedimentation; sludge; bacterial methods; costs and results; designs and estimates. Required of students taking Municipal alternative. Nine hours per week.—Prof. French.

Text-books:—Turneaure and Russell's Public Water Supplies; Metcalf and Eddy's Sewerage and Sewage Disposal.

103. WASTE DISPOSAL. Characteristics of civic wastes; garbage, rubbish and ashes; disposal methods, dumping, land treatment, incineration, reduction; economic aspects; designs and estimates. Required of students taking Municipal alternative. One hour per week, first term. —Prof. French.

Text-book:—Hering and Greeley's "Collection and Disposal of Municipal Refuse.

104. CIVIC ADMINISTRATION. This course is designed to emphasize the connection between the work of the municipal engineer and other civic activities. Such subjects as civic government and finance, education, recreation and charities and correction are discussed, as well as town planning and other engineering work of minor importance not covered in other courses. Required of students taking Municipal alternative. One hour per week, first term.—Prof. French.

Text-book:—No regular text-books are prescribed, but free use is made of various government bulletins and of current periodical literature.

GRADUATE COURSES.

For details see page 434.

DEPARTMENT OF DESCRIPTIVE GEOMETRY AND FREEHAND DRAWING.

ASSOCIATE PROFESSOR:—HENRY F. ARMSTRONG.

DEMONSTRATORS:—J. R. WINDSOR. G. FORTIN. G. THOMSON.

This Department provides a general course in drafting office methods and a training in the groundwork necessary to prepare the student for the work required in the Engineering courses of the Third and Fourth Years. The accurate use of drawing instruments is practised and study is made of the various projection methods commonly employed. The problems in Descriptive Geometry are especially designed to develop the power of mentally picturing unseen objects and grasping groups of details.

First Year.

341. DESCRIPTIVE GEOMETRY. Geometrical methods; plane figures; areas; paths of points moving in planes, etc.; projections of points, lines, plane figures and solid objects; shadows, etc.

Three hours per week.—Professor Armstrong.

Text-books:—Geometrical Drawing, by H. F. Armstrong; Descriptive Geometry, by H. F. Armstrong.

342. FREEHAND DRAWING. The object of this course is to train the eye to observe and the hand to record the essential characteristics and proportions of objects by means of sketches and diagrams of machines, etc., and to prepare dimensioned sketches from which to make scale drawings.

One hour and a half per week.—Professor Armstrong.

343. LETTERING. Types and titles such as are chiefly in use in drafting offices, including single-line, block and Roman lettering, and stencils.

One hour and a half per week.—Professor Armstrong.

Second Year.

345. DESCRIPTIVE GEOMETRY AND PERSPECTIVE. Intersections of surfaces; intersecting planes; tangent planes; axometric, including isometric, projections; perspective projection.

Three hours per week.—Professor Armstrong.

Text-book:—Descriptive Geometry, Henry F. Armstrong.

ENGLISH.

ASSOCIATE PROFESSOR:—G. W. LATHAM.

131. ENGLISH COMPOSITION. In view of the importance of accuracy of expression for those engaged in scientific or professional work, a course in English composition is prescribed for all undergraduates of the First Year. Students will be assigned to a section which will meet twice a week for practice and instruction in composition, and in addition will be called upon from time to time for individual conferences with the instructor.

Students coming to McGill from schools or colleges where an equivalent amount of English instruction is given may apply for exemption from the above course. Applications for such exemption should be addressed to the Dean of the Faculty of Applied Science not later than September 15th, and should be accompanied by certificates of standing and a certified syllabus of the course taken. Students who consider themselves qualified for exemption but cannot produce satisfactory certificates as above, may come up for a special exemption examination to be held on Saturday, October 6th, 1923, at 2 p.m. Candidates who present themselves for this examination in 1923 should be thoroughly prepared in Aydelotte's English and Engineering, Sections VII to XVII inclusive.

In connection with this course the following text-books will be used:—Lomer and Ashmun's The Study and Practice of Writing English (Houghton Mifflin); Aydelotte's English and Engineering 1923 Edition, (McGraw Hill Publishing Co.).

132. SUMMER READING. Second Year. (See page 223.)

133. SUMMER READING OR ESSAY. Third Year. (See page 224.)

134. SUMMER READING. Fourth Year. (See page 225.)

DEPARTMENT OF ELECTRICAL ENGINEERING.

PROFESSOR:—L. A. HERDT.

ASSOCIATE PROFESSOR:—C. V. CHRISTIE.

ASSISTANT PROFESSOR:—E. G. BURR.

LECTURER:—G. A. WALLACE.

DEMONSTRATORS:—W. SCHIPPEL, C. G. GLIDDON.

111. ELEMENTS OF ELECTRICAL ENGINEERING, for Third Year students in Mechanical Engineering and Fourth Year students in Chemical, Civil, Metallurgical and Mining Engineering.

A general course in electrical engineering, treating of the laws of electro-magnetism; continuous and alternating current flow in various circuits; characteristics of direct and alternating current machinery; the fundamental principles of electric lighting, power distribution and electric traction. Two hours per week.—Mr. Wallace.

Text-books:—Gray's Principles and Practice of Electrical Engineering.

112. ELECTRICAL ENGINEERING LABORATORY, for Third Year students in Mechanical Engineering and Fourth Year students in Chemical, Civil, Metallurgical and Mining Engineering.

Includes tests of direct current metering and controlling devices, dynamos, motors, boosters, motor generators and constant current machines; experiments of variable current flow in circuits; tests of alternators, synchronous motors and converters, induction motors and transformers, etc. Three hours per week.—Mr. Schippel, Mr. Gliddon.

Third Year.

113. ELECTRICAL ENGINEERING. The theoretical consideration of current flow in circuits; the laws of electro-magnetism and of the magnetic circuit; the theory and operating characteristics of direct current machinery; the principles of alternating current machinery. Required of students in Electrical Engineering. Four hours per week.—Prof. Christie.

Text-book:—Christie's Electrical Engineering.

114. ELECTRICAL ENGINEERING LABORATORY. Preparation of reports; construction, handling and protection of electrical apparatus; use of instruments and precision of measurements; predetermination of the characteristics of electrical machinery; special and shop testing.

Tests are made in the Laboratory on.—Current flow in circuits; metering and controlling devices, generators, motors, boosters, balancers and motor generator sets; arc and incandescent lamps; reflectors. These tests are intended to illustrate the principles of action and the limits of the proper use of the apparatus. Students are furnished with special laboratory notes. Required of students in Electrical Engineering. Laboratory, six hours per week. Problems, two hours per week.—Prof. Burr, Mr. Schippel, Mr. Gliddon.

Fourth Year.

117. ELECTRICAL ENGINEERING. The treatment of alternating current circuits by vector diagrams and vector equations; the theory and operating characteristics of alternating current machinery. Required of students in Electrical Engineering. Three hours per week.—Prof. Christie.

Text-book:—Christie's Electrical Engineering.

118. Electrical Engineering Laboratory. Tests are made in the laboratory on alternators, synchronous motors and converters, compensators, induction motors, transformers, frequency and phase changing apparatus, potential regulators, rectifiers, etc. Students are furnished with special laboratory notes. Required of students in Electrical Engineering. Laboratory, nine hours per week.—Dr. Herdt and Mr. Wallace.

120. Electric Lighting and Power Distribution. The design and operation of power plants and substations. Transmission and distribution systems are taken up under the following heads:—Selection of generators, transformers, switches and auxiliary apparatus with a study of their characteristics and limitations; wiring diagrams and switchboard design; line design and construction, selection of towers, insulators and conductors, calculation of sags and spans; high voltage and transient phenomena; the protection of overhead lines, cable systems and station apparatus; industrial applications of electrical apparatus; financial considerations. This subject is required of students in Electrical Engineering. Two hours per week, first term.—Dr. Herdt.

Text book:—Standard Handbook for Electrical Engineers.

121. Electric Traction. Urban, interurban and main line electrification is taken up under the following heads:—Choice of system and apparatus; calculation of motor rating and car equipment; overhead and track construction; methods of control, braking and regeneration; storage batteries and boosters; generating stations and substations, distribution systems, power supply.

This subject is required of students in Electrical Engineering. Two hours per week, second term.—Dr. Herdt.

Text-book:—Standard Handbook for Electrical Engineers.

122. Electrical Design. The electrical design of direct and alternating current machinery. Special attention is paid to the limitations of the different types of machines and to the preparation of specifications. Required of students in Electrical Engineering. Lectures, two hours per week. Problem work, three hours per week.—Prof. Christie.

Text-book:—Gray's Electrical Machine Design.

123. Applications of Electricity. Lectures on industrial and general applications of electric power, the electrical supply systems for industrial power and lighting; special problems of plant design; special problems of lighting in electrical systems; special problems of electrical transmission; electrolysis mitigation for electric railways. Lectures, one hour per week, first term, and 3 hours per week, second term.—Mr. Burr.

124. Electrical Photometry and Illumination. Electric light production; photometry; illumination; principles of interior and street illumination. First term. Lectures, two hours per week. Drafting room, two hours per week.—Prof. Burr.

DEPARTMENT OF GEOLOGY AND MINERALOGY.

PROFESSORS:—{FRANK D. ADAMS. J. AUSTEN BANCROFT.

ASSOCIATE PROFESSOR OF MINERALOGY:—R. P. D. GRAHAM.

ASSISTANT PROFESSOR OF GEOLOGY:—JOHN J. O'NEILL

LEROY FELLOW IN GEOLOGY:—F. L. FINLEY

SESSIONAL LECTURER.—JOHN A. DRESSER.

SESSIONAL LECTURER ON PALAEONTOLOGY:—TO BE APPOINTED.

Third Year.

141. GENERAL GEOLOGY. (Arts 1.) The lectures will embrace a general survey of the whole field of geology and will be introduced by a short course on mineralogy. Especial attention will be devoted to dynamical geology and to historical geology, including a description of the fauna and flora of the earth during the successive periods of its past history, as well as to the economic aspects of the subject.

The lectures will be illustrated by the extensive collections in the Peter Redpath Museum, as well as by models, maps, sections and lantern slides. In addition to the lectures there will be a demonstration each week.—Dr. Adams.

Text-book:—Cleland, Geology, Physical and Historical.

142. MINERALOGY. (Arts 5.) The lectures and demonstrations, illustrated by specimens and models, deal mainly with the description and means of identification of species, special attention being paid to the ores and economic minerals and to those which are important as rock constituents. The earlier lectures are devoted to a brief discussion of the geometrical and physical properties of minerals; their chemical composition; calculation of formulæ, etc.; and the principles of classification.—Prof. Graham.

143. DETERMINATIVE MINERALOGY. (Arts 6.) Laboratory practice in blow-pipe analysis and its application to the determination of mineral species.—Prof. Graham.

Fourth Year.

146. PETROGRAPHY. (Arts 10.) The modern methods of study employed in petrography are first described, and the classification and description of rocks is then taken up.

In addition to the lectures, one afternoon a week during the second term will be devoted to practical work in the petrographical laboratory. —Prof. Graham.

147. Advanced Petrography. (Arts 11.) This is a more advanced course than 146. In addition to the lectures, an afternoon throughout the year will be devoted to practical work in the petrographical laboratory. —Dr. Bancroft.

Text-books:—Harker's Petrology for Students.

The petrographical laboratory is open to Fourth Year Mining students.

148. Ore Deposits and Economic Geology. (Arts 7.) The nature, mode of occurrence and classification of ore deposits will first be taken up. A series of typical occurrences will then be described and their origin discussed. The more important non-metallic materials, *e.g.*, fuels, clays, building stones, etc., will be similarly treated, as well as questions of water supply, artesian wells, etc. The structure of the earth's crust, more especially with reference to folding, faulting and igneous intrusion in their bearing upon mining, will then be considered, and the course will close with a discussion of the methods employed in carrying out geological and magnetic surveys and in the construction and interpretation of geological maps and sections.

Dr. Bancroft will lecture on economic geology in the first term, and Dr. Adams on ore deposits in the second term.

Text-books:—Geikie, Outlines of Field Geology; Kemp, Ore Deposits of the United States and Canada; Lindgren, Mineral Deposits; Beck and Weed, The Origin and Nature of Ore Deposits.

Books of Reference:—The Reports of the Geological Survey of Canada, and the Publications of the U.S. Geological Survey.

149. Geology of Canada. (Arts 3.) A general description of the geology and mineral resources of the Dominion.—Dr. Bancroft.

151. Optical Mineralogy and Crystallography. (Arts 9.) A short course of lectures for students in chemistry, with laboratory practice in the measurement and drawing of crystals; calculation of axial ratios, etc.; use of the polarising microscope, axial angle apparatus, etc.—Prof. Graham.

152. Historical Geology. (Arts 4.) This is a continuation of course 141, and will consist of lectures, colloquia and museum work extending throughout the session.—Dr. Bancroft.

153. Field Work. The students in mining will receive a course of instruction in geological mapping and field work, extending over one week—in connection with the summer school of mining.—Dr. Bancroft and Prof. Graham.

Note.—Students of the Mining, Metallurgy and Chemistry courses take all the mineralogy of the Third Year. Chemistry students may, in addition, take the mineralogy of the Fourth Year No. 151.

LAW AND ECONOMICS.

ASSISTANT PROFESSOR OF ECONOMICS:—.....

LECTURER ON ECONOMICS:—FREDERICK B. BROWN.

LECTURER ON LAW:—J. W. WELDON.

171. ECONOMICS. This course is intended to give a general survey of the economic functions of society as they will present themselves to the engineer. The lectures will deal with the production and distribution of wealth; the means by which these processes are effected; the means by which they are controlled and regulated by the state or the community; the various theories concerning their operation and regulation; their effect on society; labor and capital; theories of money and credit; prices; public finance and taxation. Two hours per week in the second term of the Third Year.

172. ENGINEERING ECONOMICS. This course is intended to familiarize the engineering student with the business aspect of his profession. With this in view, lectures will be given on the subjects of property and its transfer; money and credit; stocks and bonds; partnerships and corporations; the banking system; clearing house and trust companies; the formation, organization and financing of companies; operating costs and fixed charges; depreciation and obsolescence; analysis of balance sheet and of profit and loss accounts; valuations; estimates; specifications and contracts; industrial organization; employment methods; systems of remuneration; location and planning of industries. Two hours per week in the first term of the Fourth Year.—Mr. Brown.

173. ENGINEERING LAW. This course is intended to present such an outline of the law as will be useful to engineers and business men. One hour per week in the Fourth Year.—Mr. Weldon.

DEPARTMENT OF MATHEMATICS.

PROFESSOR:—D. A. MURRAY.

ASSOCIATE PROFESSOR:—C. T. SULLIVAN.

LECTURERS:—G. J. DODD. R. S. EADIE. R. E. JAMIESON.

First Year.

191. GEOMETRY. Solid geometry and geometrical conic sections. First term.—Dr. Murray, Dr. Sullivan, Mr. Dodd, Mr. Jamieson.

Text-book:—Hall and Stevens' School Geometry, Parts I-VI (Macmillan.)

192. ALGEBRA. Miscellaneous theorems and exercises, exponential and other series, properties and solution of higher equations, complex numbers, graphical algebra with an introduction to analytic geometry, indeterminate forms, limits, derivatives, slopes of curves. First and second terms. Dr. Murray, Dr. Sullivan, Mr. Dodd, Mr. Jamieson.

Text-books:—Hall and Knights' Higher Algebra (Macmillan & Co.); Tanner and Allen's Analytic Geometry (American Book Co.), (Macmillan).

193. TRIGONOMETRY. Plane and spherical. Second term. Dr. Murray, Dr. Sullivan, Mr. Dodd and Mr. Jamieson.

Text-book:—Murray's Plane and Spherical Trigonometry, with tables. (Longmans).

194. MECHANICS. An elementary course in dynamics, statics, and hydrostatics. First and second terms. Dr. Sullivan, Mr. Dodd, Mr. Eadie, Mr. Jamieson.

Text-book:—Loney's Mechanics and Hydrostatics for Beginners (Cambridge University Press).

Second Year.

197. ANALYTIC GEOMETRY. The point, straight line, circle, parabola, ellipse and hyperbola, elements of geometry of three dimensions. First Year (latter part of second term), and Second Year (first term). The Second Year work begins with the circle. Dr. Murray, Dr. Sullivan Mr. Eadie.

Text-book:—Tanner and Allen's Analytic Geometry (American Book Co.).

198. CALCULUS. Differentiation of functions of one or more variables, successive differentiation, tangents, etc., curvature, maxima and minima, integration, with application to areas, volumes, moments of inertia, etc. First and second terms. Dr. Murray, Dr. Sullivan, Mr. Eadie.

Text-book:—Murray's Differential and Integral Calculus (Longmans).

Third Year.

201. CALCULUS. Elementary differential equations. Prescribed for Electrical Engineering students of the Third Year; optional for all others. First and second terms. Dr. Murray.

DEPARTMENT OF MECHANICAL ENGINEERING.

PROFESSOR:—C. M. McKERGOW.

ASSOCIATE PROFESSOR:—A. R. ROBERTS.

LECTURERS:—J. A. COOTE. R. H. PATTON. C. U. VESSOT.

DEMONSTRATORS:—L. R. McCURDY. G. THOMPSON. W. J. MUIR.

SHOP INSTRUCTORS:—G. WOOLEY. J. STEWART. H. LANE. W. GATEHOUSE.

First Year.

211. MECHANICAL DRAWING. Instruction in the use of drawing instruments and materials, dimensioning, conventions and standards; preparation of working drawings and tracings of machine details and the detailing of assembly drawings. Required of all Engineering students. Six hours per week.—Professor Roberts and assistants.

212. CARPENTRY AND WOOD-TURNING. Sharpening and care of wood-working tools; sawing, planing and paring to size; preparation of flat surfaces, parallel strips, and rectangular blocks; construction of the principal joints employed in carpentry and joiner work; wood-turning; use of wood-turning tools. Required of all Engineering students. Three hours per week, sixteen weeks.—Mr. Wooley.

213. SMITH-WORK. The forge and its tools; management of fire; drawing taper, square and parallel work; upsetting, twisting, cutting; welding and scarfing. Required of all Engineering students. Three hours per week for eight weeks.—Mr. Stewart.

214. FOUNDRY WORK. Moulders' tools and materials used in foundry work; the cupola; the brass furnace; core-making; bench moulding; floor moulding; open sand work; melting and pouring metal; mixtures for iron and brass casting. Required of all Engineering students. Three hours per week for eight weeks.—Mr. Lane.

215. SHOP METHODS. A brief study of woods and of hand and machine tools used in wood-working; the forge and forge tools, welding, stock calculations, steam-hammer work, drop forging. The cupola, cupola practice, moulders' tools, moulding and core-making. Lathes and machine-shop tools, interchangeable processes of manufacture, grinding, abrasives, etc. Required of all Engineering students. One hour per week.—Mr. R. H. Patton.

220. MACHINE-SHOP WORK. Chipping; filing; scraping; use of scribing block and surface gauge; marking off work for lathes and other machines; turning and boring; screw-cutting; machining flat and curved surfaces; drilling and boring; cutting angles and speeds; dressing and grinding tools. Required of all Engineering students. Three hours per week for sixteen weeks.—Mr. Gatehouse.

Second Year.

218. MECHANICS OF MACHINES. (Second term.) *Kinematics of machines.*—Constrained motion; kinematic pairing; velocity and acceleration in mechanisms; centrodes; analysis and classification of simple mechanisms, including the quadric crank chain, the slider crank chain and various wheel trains; design of involute and of cycloidal wheel-teeth. —Professor McKergow.

Text-book:—Durley's Kinematics of Machines (Wiley).

221. SHOP PROCESSES AND MANAGEMENT. Materials used and methods adopted in the manufacture of patterns; factors involved in determining cutting speeds and feeds in lathe work, design of standard tools, experimental investigation; theory of grinding and grinding machines, polishing and lapping; broaching and broaching machines; different systems of generating gear teeth; precision methods and tools. Required of all Engineering students. One hour per week.—Mr. C. U. Vessot.

Third Year.

224. MECHANICS OF MACHINES. Alternative with course (258), Accounting. Relative motion and displacement; crank effort diagrams, fly-wheels and inertia forces; the mechanism of the simple slide valve and of expansion valves; solution of valve setting problems; the function and dynamics of governors; elements of engine balancing; friction and lubrication. Required of students in Mechanical and Electrical Engineering. Three hours per week.—Mr. Vessot.

Text-book:—Ewing's Steam Engine (Camb. Univ. Press).

225. MACHINE DESIGN. Principles of the strength of materials as applied to the design of the part of machines; fastenings used in machine construction, bolts, screws, keys, cotters, rivets, and riveted joints; journals and bearings; shafts and couplings. Required of students in Mechanical and Electrical Engineering. Two hours per week.—Professor Roberts.

Text-book:—Unwin's Machine Design, Part I (Longmans). *Book of reference:*—Spooner's Machine Design (Longmans).

226. MECHANICAL ENGINEERING. General course in Mechanical. Engineering of Power Plants and Prime Movers.

Fuel and combustion, steam, and steam production; corrosion and defects of boilers; boiler accessories, principles of selection and arrangement; the steam engine; estimation of power developed and economy; condensers, pumps and accessories; steam turbines; principles of design in steam plants; gas engines and gas producer plants. Required of all Engineering students, except those in Mechanical Engineering. Two hours per week.—Professor McKergow.

Text-book:—Duncan, Steam and Other Engines (Macmillan).

227. MECHANICAL ENGINEERING. Same as course 226, but more time is given to working out practical problems.

228. MECHANICAL ENGINEERING LABORATORY. Testing and calibration of indicators, brakes and other measuring instruments; test to determine the efficiency of belt and other transmission gearing; the properties of lubricants: the economy and performance of a steam engine and boiler, of a gas engine, of an air compressor, and of a pump. Required of all Engineering students, except those taking the Electrical Engineering course. Three hours per week.—Professor McKergow and assistants.

Reference book:—Carpenter, Experimental Engineering.

223. MECHANICAL ENGINEERING LABORATORY. First term, course same as 228; second term, experimental work on the relative value of throttling and expansion governors; effect on the economy of steam engine of changing from simple to compound, triple, or quadruple expansion; the testing of steam boilers, producer gas engines, air compressors, steam turbines, and a complete steam power plant test. Required of students in Electrical Engineering. Six hours per week in first term and three hours per week in second term.—Professor McKergow and assistants.

Reference book:—Carpenter, Experimental Engineering.

229. THERMODYNAMICS. Fundamental laws and equations of thermodynamics; their application to gases and to saturated superheated vapours; efficiency of ideal heat engines; properties of steam, and elementary theory of the steam engine; elementary theory of gas and hot-air engines. Required of Third Year Students in Mechanical and Electrical Engineering. Two hours per week.—Professor Roberts

Text-books:—Ewing, The Steam Engine and Other Heat Engines (Camb. Univ. Press); Marks and Davis, Steam Tables. *Reference book:*—Ennis, Thermodynamics Applied to Engineering.

230. MECHANICAL DRAWING. Exercises in making sketches of machine parts and in preparing working drawings and tracings from them. This work may be required of Mechanical Engineering students. One week during summer term, between the Second and Third Years.—Mr. Coote.

231. MECHANICAL DRAWING. This course is supplementary to the course in machine design and consists of exercises in design and draughting of fastenings, machine parts and simple machines. Required of Mechanical Engineering students. Six hours per week for the first term and three hours per week for second term.—Mr. Coote.

232. MECHANICAL DRAWING. A course similar to 231, but less extended. Required of Electrical Engineering students. Three hours per week.

233. SMITH WORK. Tool forging and tempering, using carbon and high speed steels; making lathe and planer tools; taps, dies, drills, and tools for the forge; special welding. One week during the summer term, prior to work in Third Year session. Required of Mechanical Engineering students.—Mr. Stewart.

234. FOUNDRY WORK. Moulds requiring a higher degree of skill and judgment than in elementary course; special methods of strengthening the mould; coating for smooth surfaces on castings; methods of avoiding defects; cupola charging and operating; core mixtures and core making; coring models. For same period as 233. Required of Mechanical Engineering students.—Mr. Lane.

235. PATTERN-MAKING. Use of pattern-makers' tools; elements of pattern-making; preparation of prints and plain core-boxes; construction of patterns and core-boxes for pipes, flanges, elbows, tees and valves; built-up patterns and face-plate work; gear and wheel patterns. Required of students in Mechanical Engineering. One week during summer term.—Mr. Wooley.

236. MACHINE SHOP. Lathe work; marking off; centering; turning and boring; radial facing; filing: grinding and polishing; internal and external screw cutting; change gear calculations; taper turning and bench work. Required of students in Mechanical Engineering. Three hours per week for one term.—Mr. Gatehouse.

237. INDUSTRIAL ENGINEERING. Fundamental principles, modern tendencies and problems arising therefrom, scientific management, routing etc., personnel and collective bargaining.

Text-book:—Industrial Organization (Kimball).

Two lectures per week during the second term.—Mr. Coote.

238. ACCOUNTING. Alternative with Mechanics of Machines (224). This course is designed to give students the fundamental principles of bookkeeping and accounting so that they will be in a position to deal intelligently with the books of account and the financial statements met with in engineering work, particularly in manufacturing. One hour lecture and one problem period per week.—Mr. Coote.

Fourth Year.

240. MECHANICS OF MACHINES. (a) *Valve gears and governors.* Gyrostatic action in machines; further treatment of engine governors; knocking and shocks in reciprocating machinery; valve gears.—Prof. McKergow.

(b) *Aeronautics and Aerodynamics.* The principles underlying the stability and weight-supporting power of curved and plane surfaces driven through the air at high velocities, together with the power required to maintain these velocities, are studied, and the designs of such machines used for purposes of illustration. Required of students in Mechanical Engineering. Three hours per week.—Dr. Batho.

Reference books:—Dalby's Balancing of Engines; Spangler's Valve Gears.

241. DESIGNING. The complete design of an engine, a pump, or a machine tool, is worked out, and the requisite working drawings and tracings are prepared. Required of students in Mechanical Engineering. Three hours per week.—Professor Roberts.

242. MACHINE DESIGN. (a) Design of power transmission gearing, including belts, ropes, friction, chain and toothed gearing, fits and fitting. (b) Engine details, including cylinders, piston rods, connecting rods, shafts, fly-wheels and machine frames. Required of Mechanical Engineering students. Two hours per week.—Professor Roberts.

Text-book:—Unwin's Machine Design, Parts I and II (Longmans).
Reference book:—Spooner's Machine Design (Longmans).

243. MACHINE DESIGN. Course same as 242 (a). Two hours per week during the second term. Required of Electrical Engineering students. —Professor Roberts.

244. POWER PLANT DESIGN. The arrangement, design and operation of power plants worked by steam and gas engines; effects of requirements for lighting, heating and power distribution. One lecture hour and one drafting room period per week. Required of students in Mechanical Engineering.—Professor McKergow.

Text-book:—Gebhardt, Steam Power Plant Engineering.

247. HEATING AND VENTILATION OF BUILDINGS. Loss of heat from buildings; radiation surfaces; design and operation of heating systems; principles of ventilation; fans and blowers; design and duct systems: temperature and humidity control. One hour per week.—Professor McKergow.

Text-book:—Allen and Walker, Heating and Ventilating.

249. MECHANICAL ENGINEERING LABORATORY. Experimental investigation of:—action of governors; performance of fans and blowers; performance of steam boilers, steam engines, steam turbines, refrigeration machines, condensers, gas engines and producers; efficiency of air compressing and pumping machinery; tests of a complete steam power plant, gas power plant and a heating and ventilating system. Ten hours per week. Required of students in Mechanical Engineering.—Prof. McKergow.

Reference book:—Carpenter, Experimental Engineering.

249a. MECHANICAL ENGINEERING LABORATORY. Similar to course 249. Taken by students in Fourth Year Mechanical Engineering who take the Industrial Administration option. Two periods per week.

257. EXPERIMENTAL ENGINEERING. Theory of errors; calibration and use of instruments; measurement of power; methods of testing power-plant apparatus and the tabulation of results. Required of students in Mechanical Engineering. One hour per week.

Text book:—Carpenter, Experimental Engineering.

251. THERMODYNAMICS. Efficiency of the piston steam-engine, behaviour of steam in the cylinder, influence of size, speed rate of expansion, compounding, superheating and steam-jacketing; flow of gases and vapours through orifices and nozzles and applications to the design of steam-turbines; theory and analysis of performance of internal-combustion engines; refrigerating-machine cycles. Required of students in Mechanical Engineering. Two hours per week.—Professor Roberts.

Text-books:—Ewing's Steam Engine (Cambridge Univ. Press); Moyer, Steam Turbines (Wiley); Marks and Davis, Steam Tables and Diagrams (Longmans).

Books of reference:—Stodola, The Steam Turbine (trans. Lowenstein) (Van Nostrand); Clerk, The Gas Petrol and Oil Engine, Part I.

252. MACHINE SHOP. Experimental work and studies for the minimum time required for production, involving a consideration of the best available machine tool speeds, necessary power of belting, most efficient tool angles, quality of metal and the kind of tool steel used. The course includes work in connection with the lathe, the planer, slotter, shaper, miller and turret lathe; and instruction in gear cutting and cutter grinding. Required of students in Mechanical Engineering. Three hours per week.—Mr. Gatehouse.

253. MANUFACTURING PLANT DESIGN. Methods adopted in designing a plant for manufacture of a specified product; lay-out of shops; construction of buildings; equipment requirements for power, heat and light; fire protection, general system of operation and cost determination as

affecting design of plant. Two lecture hours and one drafting room period per week, second term.—Mr. Coote.

Text-book:—Day, Industrial Plants (Engineering Magazine).

254. INDUSTRIAL ADMINISTRATION. Organization and functions of executives; production and cost methods, purchasing, statistics, plant location and arrangement.; preparation of charts, routing systems, etc. Two lectures and one drafting period per week per session.—Mr. Coote.

DEPARTMENT OF METALLURGICAL ENGINEERING.

PROFESSOR:—ALFRED STANSFIELD.

LECTURER:—GORDON SPROULE.

SESSIONAL LECTURER:—HAROLD J. ROAST.

SPECIAL LECTURER:—CHARLES F. PASCOE.

RESEARCH FELLOWS:—W. V. FAITH. C. R. WHITTEMORE.

Third Year.

261. ELEMENTARY METALLURGY AND LABORATORY. An introductory course in general metallurgy, including metals and alloys, fuels, furnaces, refractory materials, pyrometry and calorimetry, and a short account of the metallurgy of copper, lead, iron and steel.

The instruction consists of lectures during the first term and a short laboratory course in which the following exercises will be carried out, as far as time will permit.—(*a*) Roasting a sulphide or arsenical ore; (*b*) formation and properties of copper or lead mattes and slags; (*c*) smelting a copper or lead ore in crucibles; (*d*) melting and casting certain metals and alloys; (*e*) the use of the electric furnace; (*f*) leaching a copper or silver ore; (*g*) elementary exercises in some of the following: pyrometry, calorimetry, tests of refractory materials, microscopic examination of metals, heat-treatment of iron or steel, and some simple mechanical testing methods.

Two lectures a week during the first term and one laboratory period during half of the second term.—Dr. Stansfield and Mr. Sproule.

262. ELEMENTARY METALLURGY. The course of lectures as in 261, but without laboratory work, for Chemical Engineering students.

263. FIRE-ASSAYING. The lectures and instruction sheets give an account of the furnaces, balances and other applicances used in assaying; the sampling and preparation of ores; fluxes and reagents, and the methods used in assaying gold, silver and lead ores, copper and copper ores and mattes, gold and silver bullion and base bullion, cyanide precipitates and solutions.

One lecture a week during the second term for Metallurgical and Mining students.—Mr. Sproule.

264. Fire-Assaying Laboratory. The students learn as many of the above-mentioned methods as is possible in the time allotted to this course. Care is taken that a student shall be able to make such assays as would be required at a mine, and with a fair degree of accuracy. Students usually have an opportunity of doing additional fire assaying in their Fourth Year.

Two laboratory periods a week during the second term, for Metallurgical and Mining students.—Mr. Sproule.

Reference books:—E. A. Smith, Sampling and Assay of the Precious Metals; E. E. Bugbee, Fire Assaying.

265. Metallurgical Calculations. This is an introductory course on the application of exact chemical and physical laws to metallurgical operations, such as the combustion of fuel, the smelting of ores and the construction and heating of furnaces. One lecture a week during the first term for Metallurgical students.—Dr. Stansfield.

Text-book:—J. W. Richards, Metallurgical Calculations, Vol. I.

267. Summer School (Metallurgical Works). Metallurgical students are required to attend the summer school which is held at the end of the Third Year. In this school visits are paid to metallurgical works both in Montreal and at a distance.

In addition to this, excursions may be made by the class from time to time during the term to such metallurgical works as are within reach.

Fourth Year.

271. Metallurgy (General).

(*a*) The metallurgy of iron and steel.

(*b*) The metallurgy of copper, lead, gold, silver, zinc and nickel.

Two lectures a week during the session and a few laboratory demonstrations.—Dr. Stansfield.

Text-books:—Bradley Stoughton, The Metallurgy of Iron and Steel; W. Gowland, the Metallurgy of the Non-ferrous Metals.

272. Metallurgy.

(*a*) General advanced metallurgy.

Text-books:—Fulton, Principles of Metallurgy; Hofman, General Metallurgy.

(*b*) A more detailed account of the metals mentioned in 271.

Reference books:—Hofman, Metallurgy of Copper; Hofman, Metallurgy of Lead; Hofman, Metallurgy of Zinc and Cadmium; Collins, Metallurgy of Silver; Addicks, Copper Refining; Johnson, The Principles,

Operation and Products of the Blast Furnace; Forsythe, The Blast Furnace and the Manufacture of Pig Iron.

(*c*) Metallurgical construction and design, and costs of metallurgical plant and operations.

Required of Metallurgical students. Two hours a week during the session.—Dr. Stansfield.

273. FIRE-ASSAYING AND LABORATORY. A short course for Chemical Engineering students. For particulars see 263 and 264. One laboratory period and one lecture in the first term.—Mr. Sproule.

274. METALLURGICAL LABORATORY. One half period in the first term is given to a study of Metallography (see No. 279). Three periods in the second term are devoted to the serious study of some metallurgical problem. Usually two students work together and present a thesis containing an account of important published work bearing on their subject, as well as the result of their own experimental researches. Required of Metallurgical students.—Dr. Stansfield, Mr. Roast and Mr. Pascoe.

275. ELECTRO-METALLURGY AND LABORATORY. The course of lectures is devoted mainly to a consideration of the principles and construction of electric furnaces, and their uses for smelting and refining metals. The refining of metals and the recovery of metals from their ores by electrolysis of aqueous solutions is also considered. The laboratory work is arranged to illustrate the lectures. Groups of students operate each of the main types of electric furnace and become familiar with some of the principles of electric furnace construction and design. Two lectures a week and one laboratory period during the second term for Metallurgical students. —Dr. Stansfield.

Text-book:—Stansfield, The Electric Furnace.

276. ELECTRO METALLURGY. A course of lectures as in 275, and a few laboratory demonstrations for Electrical students.—Dr. Stansfield.

277. METALLURGICAL COLLOQUIUM. One hour a week during the second term is given to informal discussions of research and other work being done in the department, and to other topics of metallurgical interest. —Dr. Stansfield.

278. METALLURGICAL MACHINERY AND DESIGN. Two periods a week, during the second term, are devoted to drafting and designing metallurgical furnaces and plants. The course includes lectures on metallurgical machinery and design, which are included in 272.

279. METALLOGRAPHY AND LABORATORY. A course of lectures and laboratory instruction in the methods of metallography and its use for controlling the heat-treatment of steel and other metals, and for detecting and explaining defects in metallic materials.

One laboratory period during the second term for Chemical Engineering students.—Mr. Roast.

EXTENSION COURSE IN METALLOGRAPHY.

Instruction in Metallography is given in the evening by Mr. H. J. Roast and Mr. C. F. Pascoe. For particulars, see Announcement of Extension Courses.

MINING AND METALLURGICAL SOCIETY.

Students taking the course in Metallurgical Engineering should become members of the Mining and Metallurgical Society, which meets at intervals during the session to read and discuss papers by student and graduate members and to hear addresses by engineers in practice. The Society has been made a students' section of the Canadian Institute of Mining and Metallurgy and its undergraduate members are therefore student members of the Institute and receive all its publications. Papers read before the Students' Society may be entered in competition for all students' prizes offered by the Canadian Institute of Mining and Metallurgy or the Engineering Institute of Canada.

RESEARCH FELLOWSHIPS AND GRADUATE COURSES. One or more research fellowships are usually offered to graduate students in Metallurgical Engineering. Details of the graduate instruction are given under "Faculty of Graduate Studies and Research."

DEPARTMENT OF MINING ENGINEERING.

PROFESSOR:—JOHN BONSALL PORTER.
ASSOCIATE PROFESSOR:—JOHN W. BELL.
LECTURER:—WILLI ERLENBORN.
DAWSON RESEARCH FELLOW:—R. C. GEGG.
DOUGLAS RESEARCH FELLOW:—R. E. LEGG.
HARRINGTON RESEARCH FELLOW:—

Third Year.

291. MINING ENGINEERING. *The principles and practice of mining.*—Introductory, simple mining methods, excavation, explosives and blasting, rock drills, coal cutters, gold washing and dredging, hydraulic mining, quarrying, etc. Two lectures per week in the second term. This course is continued in the Fourth Year. (See 297.)—Dr. Porter.

292. ORE DRESSING. *The theory and practice of ore dressing and coal washing.*—The forms in which ores occur and the effect of mixture, impurity, etc.; the theoretical considerations affecting mineral separations; the mechanical operations involved; crushing, sizing and dressing machinery—breakers, stamps, rolls, screens, jigs, vanners, tables, flotation

apparatus, washers, magnetic separators, etc. Two lectures per week and laboratory. This course is continued in the Fourth Year. (See 300.)—Dr. Porter.

ORE DRESSING LABORATORY. Simple tests of ores, sands and gravels, by means of pan, classifier, jig, table, etc. One afternoon per week in the second term. Further laboratory work in the Fourth Year. (See 305 and 306.)—Professor Bell and Mr. Erlenborn.

295. CRUSHING MACHINERY. This is the first half of course 292 and is taken by students in Chemical Engineering as well as by Mining and Metallurgical students. Two lectures per week in first term.—Dr. Porter.

293. MINE MAPPING. The calculations and plotting of mine surveys. One afternoon per week in the first term.—Professor Bell.

Text-books:—H. C. Hoover's Principles of Mining, D. W. Brunton's Safety in Tunnelling, and Peele's Mining Engineer's Handbook.

Fourth Year.

297. MINING ENGINEERING. *The principles and practice of mining.*—Prospecting, artesian and oil wells, diamond drilling, open cut mining, shaft sinking, drifting, underground development and methods of mining, timbering, hauling, hoisting, pumping, lighting, ventilating, etc.; mine accidents and their prevention; general arrangement of plant, stores and dwellings; administration; examination and valuation of mines and mine reports. Three lectures a week. Dr. Porter.

298. MINING AND ORE-DRESSING MACHINERY AND DESIGN. *The application of mechanical and electrical engineering to mining, ore-dressing and metallurgy.*—Machinery for haulage, hoisting, pumping, ventilating etc.; mine power plants, power transmission, tramways, cableways, compressors, fans, conveyors, cranes, etc.; mine and mill building, head frames, ore bins, lay-out of plant, etc. Two lectures a week and two drafting room periods in the second term for all students in course. Dr. Porter, Professor Bell and Mr. Erlenborn.

299. MINING AND ORE-DRESSING (ADVANCED). This course is supplementary to 298 and is given to students electing to take alternative (b). It includes a series of lectures and colloquia on advanced work in mining and ore-dressing and students are encouraged to take up individual subjects in-so-far as possible.

One lecture and one laboratory period per week throughout the session. Dr. Porter, Professor Bell and Mr. Erlenborn.

300. ORE-DRESSING AND MILLING. Continuation of the ore-dressing course of the Third Year. Gold and silver milling, amalgamation cyaniding, flotation, etc., concentration plants, coal breakers and washers,

general conclusions regarding plant design and lay-out. Two lectures a week in the first term. Dr. Porter.

301. MINING COLLOQUIUM. One hour a week is given to the presentation and discussion of papers on the work being done in the department and to other matters relating to mining and ore-dressing. Students are required to take the leading part in these exercises.

305. ORE-DRESSING LABORATORY. One and one-half mornings per week in the first term are given to the ore dressing and hydraulic laboratories. This time is chiefly assigned to ore-dressing, and certain typical operations are carried out. The exercises in ore-dressing are a continuation of the Third Year laboratory work, but are arranged as far as possible for individuals rather than groups of students. They comprise experiments in crushing, classifying, jigging, slime treatment, magnetic separation, cyanidation and amalgamation, coal washing, etc.

306. ORE-DRESSING LABORATORY AND THESIS WORK. In the second term one whole day and one additional morning per week are given to individual work in the laboratory and to the preparation of a thesis to be filed in the departmental library, and, when suitable, published. Students who complete the work in course 305 before the end of the first term, begin their thesis work without delay.

The subjects available for thesis work are very numerous, and range from purely theoretical investigations in crushing, screening, classification, concentration, flotation, etc., to the experimental determination of the best methods for the treatment of particular ores and coals. Numerous different lots of ore are available in sufficient quantities for work on a comparatively large scale. New ores are constantly being secured.

Text-books:—In addition to the text-books already specified for the Third Year, students are required to provide themselves with Hamilton's Manual of Cyanidation. In addition to using these formal text-books, students are required to make such frequent use of the works named below, that they should, if possible, be purchased by each member of the class. Hager's Oil Field Practice; Donaldson's Practical Shaft Sinking; Brinsmade's Mining Without Timber; Handbook of Mining Details or the Design of Mine Structures, published by McGraw-Hill Co.; Ketchum's Design of Mine Structures; McCulloch and Futers Winding Engines; Storms' Timbering and Mining; Peele's Compressed Air Plant; Richard's Textbook of Ore-Dressing; Truscott, Text-book of Ore-Dressing; Richard's Flotation and Sampling and Estimation of Ore in a Mine; Thompsons' Stamp Milling and Cyaniding, Julian and Smart's Cyaniding Gold and Silver Ores; Meagraw's Details of Cyanide Practice; Hoover's Concentrating Ores by Flotation; Prochaska's Coal Washing; Handbook of Milling Details; The Coal and Metal Miners' Pocket-book.

Research Fellowships and Graduate Courses.

Special courses of instruction are offered to graduate students in mining and ore-dressing. See announcement of the Faculty of Graduate Studies and Research. There are three endowed Research Fellowships in the gift of the Mining Department. These are assigned to graduates of the department who show particular aptitude for advanced work.

Laboratories.

The specific laboratory instruction in mining subjects proper begins in the Third Year, with courses in assaying, elementary metallurgy and ore-dressing. In the Fourth Year this work is elaborated, the general method of instruction being first to conduct a limited number of typical operations, and then to assign to each student certain methods which he must study out in detail, and upon which he must experiment and make a written report. In this work he is guided by the professors and fellows, and assisted by the other students, whom he must in turn assist when practicable. In this way every student acquires detailed knowledge of certain typical operations and makes at least one original investigation and at the same time gains a fair general experience of many of the important methods in use.

Illustrations, Museums, Societies, Etc.

In addition to the usual projection apparatus and a collection of over two thousand lantern slides, the department has a standard motion picture projector and has made arrangements with the U.S. Bureau of Mines and other sources whereby a large series of Mining films are available for class use. There is also a collection of over 4000 photographs and other illustrations, and a good departmental library, including selected trade catalogues, etc. These collections are constantly being enlarged.

The museums of the building contain suites of ores, concentrates, fuels, and metallurgical materials, models of mines and furnaces, and collections of finished products.

The McGill University Mining and Metallurgical Society and the Mining Society Camera Club meet at stated periods to read and discuss papers by graduate and student members, and occasionally to hear lectures by gentlemen eminent in the profession. The Society has been made a students' section of the Canadian Institute of Mining and Metallurgy and its undergraduate members are therefore student members of the Institute, and receive all its publications. Papers read before the Mining Society or submitted as Summer Essays may be entered in competition for all students' prizes offered by the Canadian Institute of Mining and Metallurgy, or the Engineering Institute of Canada.

Field School in Mining.

294. The summer vacation field class, instituted in 1898, is now a fixed part of the course. All students of Mining in regular course are required to attend this class at the end of the Third Year.

The school lasts from four to five weeks, depending on where it is held. Of this period about one-sixth is given to field work in geology, one-half or more to mining work proper, and the remainder to an examination of ore-dressing and milling plants and metallurgical establishments. The Professor or the Associate Professor of Mining and other members of the staff go with the party and hold daily demonstrations or classes. The students take notes and sketches on the ground, and afterwards are required to work up these notes and to submit a formal report.

During the last twenty years these field parties have visited British Columbia nine times, Nova Scotia six times, Newfoundland and Pennsylvania twice each, and Michigan three times. Numerous visits have also been made to Sudbury, Cobalt and other Ontario localities, while *en route* to more distant points.

The instruction given during this field course is free to all Mining students, the only expense to them being the cost of board, lodging and railway fares. These expenses are kept as low as is practicable and are in part met by the income from a fund provided by the late Sir William Macdonald.

At the close of the regular work of the field school, arrangements are made with the managers of the mines visited and others to give the members of the party individual employment for the remainder of the summer. All students are earnestly advised to engage in such work, and it is probable that it will be made obligatory at an early date in the future.

DEPARTMENT OF PHYSICAL EDUCATION.

Director:—Arthur S. Lamb, B.P.E., M.D.

University Medical Officer:—F. W. Harvey, B.A., M.D.

All students on entering the University, are required to pass a physical examination. They are then divided, according to the result of this examination, into five classes:—

(*a*) Fit for all forms of physical exercise.

(*b*) Fit for a limited number of forms.

(*c*) Fit for gymnasium work only.

(*d*) Fit for remedial gymnastics or temporarily unfit.

(*e*) Unfit for any form of physical exercise.

At the time of his medical examination each student is required to fill in a card indicating his choice of physical activity which he will be allowed to follow, unless debarred for medical reasons, under which circumstances he will be given a further choice among other recognized but less strenuous forms of exercise or will do gymnasium work as the case may require.

Physical education is compulsory for all students of the first two years. Two periods per week will be devoted to it.

Unexcused absences up to one-eighth of the required number of periods shall be allowed. Unexcused absences exceeding one-eighth, but not exceeding one-fourth, may be allowed if at the end of the session the student passes a special examination and satisfies the Director that he has made sufficient progress. Unexcused absences exceeding one-fourth shall disqualify a student. Such student shall be required to take extra gymnasium class work to the satisfaction of the Director, a supplemental course being given in the month of September for this purpose.

At regular intervals during each session and also at the end of each session, the Director of Physical Education shall furnish the Dean of each Faculty with a list of students who have failed to meet the attendance requirements as laid down in the ordinary curriculum, or who have proved unsatisfactory in other respects, and such cases shall be dealt with by the respective Faculties.

No student in default shall be allowed to proceed to the next year of his course unless for special reasons exemption should be granted on the recommendation of his Faculty and approved by the Committee on Physical Education.

Not less than one month before the conferring of degrees in each session the Director shall furnish to the Registrar of the University, for transmission to Corporation and the Faculties concerned, a list of all students, being candidates for degrees at the forthcoming Convocation, who have failed to satisfy the requirements of the Committee on Physical Education, and no Diploma for a degree shall be issued to any such candidate unless by the express direction of Corporation.

DEPARTMENT OF PHYSICS.

DIRECTOR:—A. S. EVE.

PROFESSOR:—L. V. KING.

ASSOCIATE PROFESSORS:—J. A. GRAY. A. N. SHAW

ASSISTANT PROFESSORS:—H. E. REILLEY. D. A. KEYS. E. S. BIELER.

DEMONSTRATORS:—V. HENRY. R. J. CLARK. L. A. SMITH. W. C. QUAYLE. M. CROWE. N. CAM. A. V. DOUGLAS. T. C. THOMPSON.

The instruction includes a fully illustrated course of experimental lectures on the general principles of physics, embracing in the First Year:—*The Laws of Energy, Heat, Light and Sound;* in the Second Year, *Electricity and Magnetism*, accompanied by courses of practical work in the laboratory, in which the students will perform for themselves experiments, chiefly quantitative, illustrating the subjects treated in the lectures. Opportunity will be given to acquire experience with all the principal instruments used in exact physical and practical measurements.

First Year (Architecture).

44. GENERAL COURSE. (Arts No. 1.) Two hours Wednesday and Friday at 2 p.m.—Dr. Eve.

Text-book:—Kimball's College Physics (Holt).

45. LABORATORY COURSE. (Arts No. 1.) Two hours per week.

Text-book:—Laboratory Manuscripts (Renouf Pub. Co.).

First Year.

311. HEAT, SOUND AND LIGHT. (Arts No. 2.) Two hours per week. —Dr. Shaw.

Text-book:—Duncan & Starling's Heat, Light and Sound (Macmillan).

312. LABORATORY COURSE. (Arts No. 2.) Two hours per week, spent in practical measurements in the Macdonald Physical Laboratory in conjunction with the lecture course. See time-table of sections.

Text-books:—Laboratory Manuscripts, Barnes & Wheeler (Renouf Pub. Co.).

Second Year.

315. ELECTRICITY AND MAGNETISM. (Arts 3A.) Two hours per week. —Dr. Gray.

316. LABORATORY COURSE. (Arts 3A.) Two hours per week.

Text-books:—Duncan and Starling, Electricity and Magnetism (Macmillan's); Laboratory Manuscripts (Renouf Publishing Co.).

Fourth Year.

320-321. LABORATORY COURSE. (ARTS 6A.) Students of Electrical Engineering will continue their work in the Physical Laboratory in the Fourth Year. The following is a brief outline of the course:—

Magnetic elements and measurements; testing magnetic qualities of iron; theory and practice of absolute measurements; comparison and use of electrical standards of resistance, E.M.F., self and mutual-induction, and capacity; testing and calibration of ammeters and voltmeters; insulation and capacity tests; electric light photometry; electrical properties of thermionic valves. Two lectures and two laboratory periods per week. Dr. King and Mr. Clark.

Text-book:—Laws' "Electrical Measurements" (McGraw-Hill).

325 to 329. ADVANCED COURSES AND RESEARCH. For advanced courses of lectures, see announcement of the Faculty of Graduate Studies and Research and also Arts Faculty Bulletin under honour courses. There are special facilities offered for those desiring to take up research work in heat, optics, sound, electricity and magnetism, and radioactivity.

For Course in Engineering Physics see page 221.

DEPARTMENT OF SURVEYING AND GEODESY.

ASSISTANT PROFESSORS:—{A. J. KELLY. JAMES WEIR.

DEMONSTRATOR:—V. R. DAVIES.

This course is designed to give the student a theoretical and practical training in the methods of plane and geodetic surveying, in the field work of engineering operations, and in practical astronomy in its application to geodesy. The course is divided as follows:—

Second Year.

346. SURVEYING. Chain and angular surveying; the construction, adjustment, use and limitations of the transit, level, micrometer, compass and minor field and office instruments; railway circular curves; planimeter and pantograph; general topography; levelling; contour surveying; stadia surveying; photographic surveying; land systems of the Dominion and provinces. Mr. Kelly.

Text-books.—Johnson and Smiths' Theory and Practice of Surveying; Breed and Hosmer's Principles and Practice of Surveying, Vol. 1.

347. FIELD WORK. (1) Compass and chain, compass and micrometer, and chain surveying.

(2) Differential, profile, topographic and quantity levelling.

(3) Azimuth and deflection, angle traversing, accurate methods of angle measurement, and stadia surveying.

348. MAPPING. Drafting from field notes of chain and stadia surveys; plotting topographical features; tinting maps with water-colours. Plotting photographic surveys.

Third Year.

351. MAP PROJECTIONS. Graphical determination of spherical triangles; spherical projections, and the construction of maps. Mr. Weir.

352. SURVEYING. Theory and use of instruments; hydrographic surveying; the use of the plane table; mining surveying; barometric and trigonometric levelling; elements of practical astronomy. Mr. Kelly.

Text-book:—Johnson and Smith's Theory and Practice of Surveying.

Reference Book:—Durham's Mine Surveying

353. SURVEYING. Theory and use of instruments; the use of the plane table; mining surveying; magnetic surveying; hydrographic surveying; barometric and trigonometric levelling; theory and setting-out of transition curves; elements of geodetic surveying; elements of practical astronomy. Mr. Weir.

Text-books:—Johnson and Smith's Theory and Practice of Surveying; Hosmer's Practical Astronomy.

354. FIELD WORK. (1) The adjustments of the instruments; (2) the preliminary, topographic and location surveys for a railway, including simple, compound, transition and vertical curves, profile levelling, cross-sectioning for construction, and plotting of field notes; (3) a topographic survey with the stadia transit and plane table; (4) a hydrographic survey of a river channel, including measurement of discharge; (5) a survey at night illustrating underground methods; (6) astronomical observations with engineer's transit.

Fourth Year.

359. GEODESY. The determination of time, latitude, longitude and azimuth; figure of the earth, measurements of base lines and triangulation systems; adjustment and reduction of observations. Mr. Weir.

Text-book:—Hosmer's Geodesy.

361. FIELD WORK. (1) Determination of latitude, (*a*) by transit and sextant observations of Polaris, (*b*) by zenith telescope, (*c*) by noon observations with transit and sextant; (2) determination of azimuth, (*a*) by equal altitude, observations of the sun, (*b*) by observations of elongation of Polaris, (*c*) by observation of a circumpolar star with engineer's transit, (*d*) by means of solar attachments and solar compass; (3) determination of time (*a*) by equal altitude observations of the sun with sextant and transit, (*b*) by observations of the meridian passage of stars with astronomical transit; (4) determination of longitude by clock comparisons; (5) base line measurements; (6) precision levelling; (7) measurement of angles by geodetic methods; (8) plane table surveys.

360. GEODETIC LABORATORY. The following determinations of the constants and errors of surveying instruments are made in the geodetic laboratory by the Fourth Year students in the Civil Engineering course:—Measurement of (1) magnifying power, (2) eccentricity of circles, (3) inclination error in astronomical transits by nadir observations; determinations of (4) gravity by means of the reversible pendulum, (5) errors of run of theodolite microscopes, (6) constants of steel tapes, (7) scale value of level vials, (8) collimation error of astronomical transits by fixed collimators and by nadir method; investigation of the errors of graduation of (9) steel bars, (10) steel tapes, (11) transit circles, (12) the testing of aneroid barometers.

See also page 280.

FIELD WORK.

Field work is required of all students entering the Second Year, of students of the Third Year in the courses of Civil and Mining Engineering, and of the Fourth Year in Civil Engineering. The work will begin in 1924 on April 28th and will continue for four weeks.

Students entering Second and higher Years from other Universities or from other Faculties and who cannot attend the above courses in Field Work, must attend Special Summer Schools, details of which are given on page 222.

All students are required to keep complete field notes, and to prepare maps, sections and estimates for their own surveys. This office work is principally done during the regular summer school session.

REGULATIONS CONCERNING PREREQUISITE SUBJECTS.

REGISTRATION, STANDING AND PROMOTION.

(1) Students proceeding to a degree shall be classed as Undergraduates or Conditioned Undergraduates. Undergraduates are those who, having passed all entrance requirements, have also at the close of any session passed the examinations in all the subjects of their course, or who at the opening of the following session have removed all conditions by passing supplemental examinations in the subjects in which they failed. Conditioned Undergraduates are those who have failed to remove their conditions as above.

(2) No student proceeding to a degree shall be allowed to take any subject, unless he has previously passed, or secured exemption in, all prerequisite subjects.*

(3) No Conditioned Undergraduate shall be permitted to take any Second Year subject until he has passed, or secured exemption in, all matriculation requirements, and similarly, no Third or Fourth Year work may be undertaken until all First or Second Year subjects respectively shall have been passed.

The Faculty may, however, waive this rule in special cases on recommendation of the Committee on Registration, Standing and Promotion.

(4) Conditioned Undergraduates proceeding to a degree must follow a course of study approved by the Faculty on the recommendation of the Committee on Registration, Standing and Promotion. They may be required to repeat subjects in which they have passed, but in which their standing has been low.

(5) Partial students are those who are not proceeding to a degree Such students may be admitted to classes without regard to the prerequisite rule, provided that they have obtained the permission of the head of each department concerned, and have also had their courses approved by the Committee on Registration, Standing and Promotion.

(6) If a partial student wishes to obtain undergraduate standing in order to proceed to a degree, he shall not be given credit for subjects taken in contravention of the prerequisite rule until he has also passed

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*Prerequisite subjects are those which, in the opinion of the Faculty, must be mastered before the subjects to which they are prerequisite can be intelligently studied.

Concurrent subjects are related subjects which should be studied in the same session.

examinations or secured exemptions in such prerequisites as may be demanded by the Committee on Registration, Standing and Promotion, and, on the recommendation of this Committee, has had his case approved by a unanimous vote of the Faculty.

No Fourth Year student shall be allowed a supplemental or special supplemental examination in any subject in the period between the opening of the second term and the date of Convocation.

List of subjects in the Faculty of Applied Science with the number of subjects which are prerequisite and concurrent.

No.	Year	Subject	Prerequisite	Concurrent
1	II	Arch. Design A	18, 33, 38	6
2	III	" " B	1	7
3	IV	" " C	2	8
4	V	" " D	3	
5	I	Elements of Architecture		
6	II	Elements of Composition		
7	III	Theory of Design	1	
8	IV	Theory of Planning	1	
9	III or IV	Ornament and Decoration	34, 39	
10	III or IV	" " "	34, 39	
11	III or IV	" " "	34, 39	
12	III or IV	" " "	34, 39	
13	I	General History (Arts II)		
14	II	History of Arch. (Classic)		34
15	III or IV	" " (Mediaeval)	13	35
16	III or IV	" " (Renaissance)	13	36
17	V	" " (Modern)	14	
18	I	Architectural Geometry I		
19	II	Arch. Geometry II	18	
22	IV or V	Hygiene of Buildings		
23	IV or V	Heating and Ventilation		
24	II	Building Construction		
25	II	Building Details		24
26	II	Architectural Engineering I		
27	II	Arch. Engineering I (Draughting)		26
28	III or IV	Architectural Engineering II A	26	
29	III or IV	Arch. Eng. II A (Draughting)	26	28
30	III or IV	Architectural Engineering II B	26	
31	III or IV	Arch. Eng. II B (Draughting)	26	30
32	V	Professional Practice	24	
33	I	Architectural Drawing		5
34	II	" "		
35	III	" "		
36	IV	" "		
37	V	Historical Drawing		
38	I	Freehand Drawing		
39	II	" "	38	
40	III	" "	39	
41	IV	" "	40	
42	IV	Modelling		
43	V	"	42	
44	I	Physics (Arts)		
45	I	Physics Lab. (Arts)		
46	II	Architectural Essay		
47	III	" "		
48	IV	" "		
49	V	" "		
50	II, III, IV, & V	Summer Work		
51	II	General Chemistry	311, 312	52
52	II	Gen. Chem. Lab. (Eng. Students)	311, 312	51
54	III	Inorg. Qual. Anal.—Summer School (Chem. Eng. and Met. Eng. Students)	51, 52	55

No.	Year	SUBJECT	Prerequisite	Concurrent
55	III	Inorg. Qual. Anal. Lab.—Summer School (Chem. Eng. and Met. Eng. Students)	51, 52	54
56	III	Organic Chemistry	51, 52	57
57	III	" " Lab		56
58	III	Physical Chemistry	51, 52	
59	III	Inorg. Qual. Anal.	51, 52	60
60	III	" " " Lab		59
61	III	" Quant. "	51	62
62	III	" " " Lab		61
64	IV	Advanced Organ. Chem	56, 57	65
65	IV	Advanced Organic Laboratory	56, 57	64
66	IV	Physical Chem. and Lab	58	
67	IV	Inorg. Lab	61, 62	
68	IV	Industrial Chemistry, Inorganic	61, 62	
69	IV	Industrial Chemistry, Organic	61, 62	
70	IV	Applied Electro-Chem	51, 52	
71	IV	Inorg. Quant. Anal. (Mining Students)	59, 60	
72	IV	Adv. Inorg. Chemistry	58	
73	IV	Food Chemistry	56, 57	65
74	IV	History of Chemistry	51, 56	
75	IV	Colloid Chemistry	56,57,58,59,60	
81	II	Materials of Construction		
82	III	Sanitary Science		
83	II	Mechanics	194	198
85	III	Highway Engineering		
86	III	Mechanics	83, 198	
87	III	Strength of Materials	83, 198	
88	III	" " " Lab		87
89	III	Foundations		87
90	III	Structural Engineering		87
91	IV	Mill Buildings	90	
92	III	Railway Engineering	83,346,347,348	
92a	III	" "	83,346,347,348	
93	III	" "		92
93a	III	" "	83,346,347,348	
94	IV	Theory of Structures	87	
95	IV	Strength of Materials	87	
96	IV	Bridge Design	90	94
96a	IV	" "	90	94
97	III & IV	Hydraulics	83	
98	III & IV	" Lab		97
99	IV	" Machines		97
100	IV	Hydraulics and Lab. (Short Course)	83	
101	IV	Municipal Engineering	97, 98	
102	IV	Water Supply & Sewerage	82, 97, 98	
103	IV	Waste Disposal		
104	IV	Civic Administration		
111	III & IV	Elements of Elec. Eng.	198, 315, 316	
111a	III & IV	" " "	198, 315, 316	
112	III & IV	Elec. Eng. Lab. (Elementary)		111
112a	III & IV	" " "	198	
113	III	Electrical Engineering	198	
114	III	Elec. Engineering Lab		113
117	IV	Electrical Engineering	113, 114, 201	320, 321
118	IV	Elec. Eng. Lab. (Elec. Eng. Students)	113	117
120	IV	Elec. Light and Power Distribution		117, 118
121	IV	Electric Traction		117, 118
122	IV	Electrical Designing	232	117, 118

No.	Year	SUBJECT	Prerequisite	Concurrent
123	IV	Applications of Electricity	113	117
124	IV	Elec. Photometry and Illumination	113	117
131	I	English Composition		
132	II	Summer Reading		
133	III	Summer Reading or Essay		
134	IV	Summer Essay		
141	III	Geology, General		
142	III	Mineralogy	51	
143	III	Mineralogy, Determinative	51	
146	IV	Petrography and Lab	141	
147	IV	Petrography (Advanced)	141, 142, 143	
148	IV	Ore Deposits and Economic Geol	141	
149	IV	Geology of Canada	141	
151	IV	Crystallography	142	
152	IV	Geology, Historical	141, 142, 143	
153	IV	Geology Fieldwork (with 294)	141, 142, 143	
171	III	Economics		
172	IV	Engineering Economics	171	
175	IV	Engineering Law		
191	I	Geometry		
192	I	Algebra		
193	I	Trigonometry		
194	I	Mechanics		
197	II	Analytic Geometry		
198	II	Calculus	192	
201	III	Calculus	198	
211	I	Mechanical Drawing		
212	I	Carpentry and Wood Turning		
213	I	Smith Work		
214	I	Foundry Work		
215	I	Shop Methods		
218	II	Mechanics of Machines	191, 192, 194	
220	I	Machine Shop Work		
221	II	Shop Processes		
223	III	Mech. Eng. Lab. (Elec. Eng. Students)		226
224	III	Mechanics of Machines	83, 218	
225	III	Machine Design		87, 231 or 232
226	III	Mech. Eng. (General Course)		228
227	III	" " (Mech. Eng. Students)		228
228	III	" " Lab		226, 227
229	III	Thermodynamics	198	
231	III	Mech. Drawing (Mech. Eng. Stud.)		225
232	III	" " (Elec. Eng. Stud.)		225
233	III	Smith Work (Summer School)	213	
234	III	Foundry Work (Summer School)	214	
235	III	Pattern Making	212	
236	III	Machine Shop Work	220	
237	III	Industrial Engineering		
240	IV	Mechanics of Machines	224	
241	IV	Designing	225, 231	242
242	IV	Mach. Design (Mech. Students)	225	
243	IV	Mach. Design (Elec. Students)	225	
244	IV	Power Plant Design	227	
245	IV	Locomotive Engineering	227	244
246	IV	Marine Engineering	227	244
247	IV	Heat and Ventilation of Buildings	227	244

No.	Year	SUBJECT	Prerequisite	Concurrent
249	IV	Mech. Eng. Lab	227, 228	
249a	IV	Mech. Eng. Lab. (alt.)	227, 228	
251	IV	Thermodynamics	228, 229	
252	IV	Machine Shop Work	236	
253	IV	Manufacturing Plant Design		
254	IV	Industrial Administration	221, 258	252
257	IV	Experimental Engineering	227, 228	249
258	I.I	Accounting		
261	I.I	Elem. Metallurgy and Laboratory	51	
262	I.I	Elem. Metal. (Chem. Eng. Stud.)	51	
263	I.I	Fire Assaying	51, 52	264
264	I.I	Fire Assaying Laboratory	51, 52	263
265	I.I	Metall. Calculations		261
267	IV	Summer School (Metall. Works)		
271	IV	Metallurgy (General)	261	
272	IV	" (Metall. Students)	261	271
273	IV	Fire Assay. & Lab. (Chem. Eng. Stud.)	263	
274	IV	Metall. Lab. Thesis	261	271
275	IV	Electro-Metallurgy and Lab	51	
276	IV	" " (Elec. Stud.)		275
277	IV	Metall. Colloquium	261	271
278	IV	Metall. Machinery and Design	261	271
279	IV	Metallography (Chem. Eng. Stud.)		
291	I.I	Mining Engineering	51	
292	I.I	Ore Dressing and Laboratory		142, 226
293	I.I	Mine Mapping	346, 348	
294	I.I	Mining Field School	141	
295	I.I	Crushing and Grinding Machinery		226
297	IV	Mining Engineering	226, 291	
298	IV	Mining Machinery and Design	81, 226, 300	297
299	IV	Mining Machinery (Advanced)	315	297
300	IV	Ore Dressing and Milling	292	
301	IV	Mining Colloquium		297, 300
305	IV	Ore Dressing Laboratory	292	300
306	IV	Ore Dressing Lab. (Thesis Work)	264, 305	
311	I	Physics		
312	I	Physical Laboratory		311
315	II	Physics		
316	II	Physical Laboratory		315
320	IV	Physics (Electrical Engineering)	315, 316	
321	IV	Physical Laboratory (Elec. Eng.)		320
341	I	Descriptive Geometry		
342	I	Freehand Drawing		
343	I	Lettering		
345	II	Descriptive Geom. and Perspective	341	
346	II	Surveying	191, 193	
347	II	Surveying Fieldwork		
348	II	Mapping	343	
351	III	Map Projections	345	
352	III	Surveying (Miners)	346, 347	
353	III	Surveying (Civils)	346, 347	
354	III	Surveying Fieldwork	346, 347	
359	IV	Geodesy	353	
360	IV	Geodetic Laboratory		359
361	IV	Geodetic Fieldwork	353, 354	
400	IV	Military Science		

EXAMINATION TIME TABLES.

I.—Supplemental Examinations.

Supplemental examinations for all subjects of the First, Second and Third Years Applied Science are held in September. A schedule of these examinations may be obtained from the Dean.

II.—Sessional Examinations.

Note:—The following numbers correspond with the subjects in the prerequisite list and the departmental descriptions. Examinations begin at Nine A.M. and Two P.M., and normally last three hours.

Time Table, First Term Examinations (Subject to Revision).

Date		First Year	Second Year	Third Year	Fourth Year
January 16th	A.M.	....	....	9, 82, 261, 351	9, 91, 300, 359
" "	P.M.	....	....	....	70
January 17th	A.M.	191	....	58, 86	67, 120, 149, 273
" "	P.M.	13	197	....	....
January 18th	A.M.	....	....	97, 265, 295, 352	97, 100, 103
" "	P.M.	44	....	....	172
January 19th	A.M.	....	....	59, 61, 92a	22, 68, 71, 104, 124
" "	P.M.	....	....	....	....

SECOND TERM TIME TABLE EXAMINATIONS (Subject to Revision)

(First three years in Engineering and the whole course in Architecture)

DATE		FIRST YEAR	SEOND YEAR	THIRD YEAR	FOURTH AND FIFTH YEAR
April 16th	A.M.	....	....	....	....
" "	P.M.	341	345	....	17
April 17th	A.M.	....	81	90, 201	....
" "	P.M.	193	....	61	23
April 18th	A.M.	....	51	10, 113, 237, 292, 353	10
" "	P.M.	131	6, 52	....	7, 32
April 19th	A.M.	5	26, 315	226, 227	....
" "	P.M.	311	....	89, 263	175
April 21st	A.M.	44	346	30, 229	....
" "	P.M.	....	....	88	....
April 22nd	A.M.	192	....	16	....
" "	P.M.	....	83	87	....
April 23rd	A.M.	13, 215	24	141	....
" "	P.M.	....	198	111, 141	....
April 24th	A.M.	194	....	56, 291	....
" "	P.M.	....	14, 221	171	....
April 25th	A.M.	33	....	85, 92, 224, 258	....
" "	P.M.	....	218	223, 228	....
April 26th	A.M.	18	19	142, 225	....
" "	P.M.	....	....	....	....

SECOND TERM EXAMINATIONS (Subject to Revision).

DATE		FOURTH YEAR
May 5th	A.M.	175
" "	P.M.	75, 247
May 6th	A.M.	123, 152, 244, 279
" "	P.M.	151, 272
May 7th	A.M.	64, 117, 271
" "	P.M.	101, 102, 251
May 8th	A.M.	73, 95, 254
" "	P.M.	122, 148
May 9th	A.M.	69, 94, 320
" "	P.M.	146, 240, 253
May 10th	A.M.	72, 121, 249
" "	P.M.	111, 147, 299
May 12th	A.M.	278, 298
" "	P.M.	66, 96, 242, 243
May 13th	A.M.	74, 297
" "	P.M.	99, 275, 276
May 14th	A.M.	67, 257
" "	P.M.	321

III.—THE LECTURE TIME TABLES.

Complete time tables for all lectures and laboratory work are bulletined in the Engineering Building, and copies may be obtained from the Dean of the Faculty.

FACULTY OF MEDICINE.

The ninety-second session of the Faculty will be opened on September 24th, 1923. The regular lectures in all subjects will begin on that date at the hours specified in the time-tables, and will continue until April 30th, 1924.

FOUNDATION AND EARLY HISTORY.

The Faculty of Medicine of McGill University is the direct outcome and continuance of a teaching body known as the Montreal Medical Institution, which was organized as a medical school in the years 1823-24 by Drs. Wm. Robertson, Wm. Caldwell, A. F. Holmes, John Stephenson and H. P. Loedel. These men constitute the first medical staff of the Montreal General Hospital, itself established in 1819. The first session of the Montreal Medical Institution opened in November, 1824, with 25 students, and the lectures were given at the house of the Institution, No. 20 St. James Street, a building situated on the north side of St. James Street, at or near Place d'Armes.

In the year 1829, the Montreal Medical Institution became, by the formal act of the Governors of the Royal Institution for the Advancement of Learning, the Medical Faculty of McGill University. It is thus the oldest Faculty of the University. The first session of the McGill Medical Faculty took place in the winter of 1829-30, and the first university degree, a medical one, was conferred four years later in 1833.

There were no sessions held during the political troubles of 1836 to 1839, and it is owing to this fact that this is the ninety-second instead of the ninety-fifth session of the Faculty, dating from its incorporation with the University in the year 1829.

The work of the Faculty was carried on in the central part of the city until 1872, when a building was provided by the Governors on the University grounds. This building met the demands of the steadily increasing number of students until 1885, when an addition was found to be necessary.

In 1893 and again in 1897, further extensions and alterations were made, funds for the purpose having been provided by generous friends of the Faculty.

On the 16th of April, 1907, a part of these new buildings, together with the original medical building, was destroyed by fire.

The erection of a new building was at once begun on a new site, at the corner of Pine Avenue and University Street, and in 1910 the greater part of it was ready for occupation. In 1911 it was wholly available for the work of the Faculty.

ENTRANCE REQUIREMENTS.

All inquiries relating to the examinations for entrance should be addressed to the Registrar of the University.

No student will be permitted to register in the Faculty of Medicine unless he has completely satisfied the matriculation requirements.

The requirements for entrance to the Faculty of Medicine are:—

(a) The completion of the first year in the Faculty of Arts of any recognized university, with Physics compulsory

or

(b) Any equivalent provincial, state, or university examination recognized by the University.*

Unless the candidate has a B.A. or a B.Sc. degree he must also have completed the Junior Matriculation requirements in Latin.

Intending students who wish to enter by certificates should under no circumstances come to the University without having first obtained from the Registrar a statement of the value of the certificates they hold, as many of these may lack one or more essential subjects, or the work done in a subject may not be adequate, or, again, the percentage gained may not be sufficiently high. When a diploma or certificate does not show the marks obtained in the several subjects of the examination, it must be accompanied by an official statement containing this information.

Students who intend practising in Canada are warned that in certain of the provinces it is necessary to be registered five years before obtaining a license to practise. Entrance qualifications should be registered in the province in which the student intends to practise at the beginning of his course in the Faculty of Medicine and they must be not later than the close of the first year of his course therein.

The names and addresses of the Registrars of the several Provincial Medical Councils are as follows:—

QUEBEC.—Dr. J. Gauvreau, Dandurand Bldg., corner St. Catherine and St. Denis Streets, Montreal.

ONTARIO.—Dr. H. Wilberforce Aikins, 170 University Avenue, Toronto.

NEW BRUNSWICK.—Dr. J. S. Bentley, St. John.

NOVA SCOTIA.—Dr. W. H. Hattie, Halifax.

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*For example, the Senior Matriculation Examination of McGill University or the Honour Matriculation Examination of the Province of Ontario will be accepted *pro tanto*. Particulars of the requirements in each subject of the Senior Matriculation Examination are contained in the General Announcement, which will be sent on request to the Registrar of the University.

PRINCE EDWARD ISLAND.—Dr. James Warburton, Charlottetown.
NEWFOUNDLAND.—Dr. H. Rendell, St. John's.
MANITOBA.—Dr. J. E. Coulter, Winnipeg.
ALBERTA.—Dr. Geo. R. Johnston, Calgary.
SASKATCHEWAN.—Dr. A. MacG. Young, Saskatoon.
BRITISH COLUMBIA.—Dr. A. P. Proctor, Vancouver.

ADVANCED STANDING.

A student of another university who desires to be admitted to advanced standing in the Medical Department of this University will send his application to the Dean of the Faculty, together with:—

1st.—A Calendar of the University in which he has studied, giving a full statement of the courses of study.

2nd.—An official statement of the course he has followed and the standing he has obtained.

3rd.—A certificate of conduct.

PHYSICAL EXAMINATION, VACCINATION AND HEALTH.

In order to promote as far as possible the physical welfare of the student body, every student coming to the University for the first time will be required to pass a physical examination to be conducted by, or under the direction of, the Director of the Department of Physical Education, or by a recognized representative. Students of the Second Year, as well as those of all years who wish to engage in athletic activities, are also required to be physically examined. The hours for this examination will be announced at registration.

By such examination physical defects and weaknesses may be discovered. If such defects and weaknesses are amenable to treatment by corrective gymnastics special exercise will be prescribed and instruction provided. The students will be advised as to what forms of exercise will be likely to prove beneficial or harmful.

Students who do not present themselves for this examination (or otherwise satisfy the Director) before November 1st, will not be allowed to attend the University.

Re-examinations will be held frequently throughout the session for those students who are of low category, or who are suffering from physical disabilities.

All students entering the University for the first time are required to present a certificate, or other satisfactory evidence, of successful vaccination, failing which, they shall at once be vaccinated, in a manner satisfactory to the medical examiner.

Provision is made by the Departments for the care of the health of undergraduate students during the session. Hospital accommodation is provided for seven days only except under special circumstances.

REGISTRATION.

In order to prevent overcrowding of class rooms and clinics it has been decided to limit the number of students registering in the First Year of the medical course to one hundred. Early application is advised.

Students in the Faculty of Medicine will register at the Registrar's Office for the session 1923-24 on September 17th to September 22nd, 1923. Those who wish to register after September 22nd will be required to pay a fee of $5.00 during the first week of the session and $10.00 during the second week before they will be allowed to do so. This fee will not be refunded except for satisfactory reasons and by the authorization of the Faculty. No student will be admitted after the fifteenth day of the session except by special permission of the Faculty.

REQUIREMENTS FOR LICENSE TO PRACTISE.

Intending students are reminded that a University degree in Medicine does not always give a right to practise the profession of medicine. It is necessary to conform with the medical laws of the country or province in which it is proposed to begin practice. Each province in Canada at present has its special requirements for license, and in most provinces a special standard of general education is insisted upon before beginning the study of Medicine.

For names and addresses of Registrars of Provincial Medical Councils, see page 280.

DOMINION REGISTRATION.

In order to take the examination of the Medical Council of Canada a candidate must have the license of a Canadian province, or he must present a certificate from the Registrar of a Provincial Medical Board that he holds qualifications accepted and approved of by the Medical Board of said province.

Full information may be obtained by writing to the Registrar, Dr. R. W. Powell, 180 Cooper Street, Ottawa, Ontario.

GENERAL COUNCIL OF MEDICAL EDUCATION AND ENREGISTRATION OF GREAT BRITAIN.

The Matriculation Examination in Medicine of this University is accepted by the General Medical Council of Great Britain. Graduates of this University who desire to register in England are exempted from any examination in preliminary education on production of the McGill Matriculation certificate. Certificates of this University for attendance on lectures, practical work and clinics are also accepted by the various examining boards in Great Britain. To obtain a license from the General Council it is necessary to pass one of the examining boards of Great Britain in both primary and final subjects.

Detailed information may be obtained from one of the three registrars: Henry E. Allen, B.A., 299 Oxford Street, London; James Robertson, 54 George Street, Edinburgh; Richard J. E. Roe, 35 Dowson Street, Dublin.

RECIPROCITY WITH GREAT BRITAIN.

The General Council of Medical Education and Enregistration of Great Britain has entered into reciprocal relations with the Medical Boards of the Provinces of Quebec, Ontario, Nova Scotia, New Brunswick, Prince Edward Island, Saskatchewan, Manitoba, and Alberta. A holder of a degree in Medicine of McGill University who has obtained the license of the Province of Quebec, may register with the Medical Council of Great Britain, and will be able to practise in Great Britain, South Africa, Australia, India and the West India Islands without further examination.

THE UNDERGRADUATE COURSE.*

The Undergraduate Course consists of six sessions of eight months each, the work being arranged as follows:—

FIRST YEAR.

Biology:—Three hours' lectures and two three-hour laboratory periods throughout the session.

Chemistry:—Three hours' lectures and two three-hour laboratory periods throughout the session.

Physics:—Three hours' lectures and two two-hour laboratory periods throughout the session.

English:—A tutorial class in English expression and a lecture course similar to that in First Year Arts.

SECOND YEAR.

Anatomy:—Three hundred and sixty hours.

Histology and Embryology:—One hundred and eighty hours.

Physiology:—A course of sixty hours in General Physiology and one hundred and eighty hours in Human Physiology.

Chemistry:—Organic Chemistry, sixty hours.

THIRD YEAR.

Anatomy:—Including Organogenesis, three hundred and sixty hours.

Biochemistry:—Two hundred and forty hours.

Physiology:—One hundred and fifty hours.

Bacteriology:—One hundred and twenty hours.

Parasitology:—Forty hours.

History of Medicine:—Fifteen hours.

*It should be understood that the programme and regulations regarding courses of study and examinations contained in this calendar hold good for this calendar year only, and that the Faculty of Medicine, while fully sensible of its obligations towards the students, does not hold itself bound to adhere absolutely, for the whole of a student's course, to the conditions here laid down.

FOURTH YEAR.

Pharmacology:—One hundred and fifty hours.

Pathology:—One hundred and fifty hours.

Hygiene:—Ninety hours.

Pathological (Clinical) Chemistry:—Sixty hours.

Clinical Microscopy:—Sixty hours.

Psychology:—Thirty hours.

Medicine:—One hundred and fifty hours.

Surgery:—One hundred and fifty hours.

Obstetrics and Gynæcology:—Sixty hours.

FIFTH YEAR.

Pathology:—Ninety hours.

Medical Jurisprudence:—Forty hours.

Clinical Therapeutics:—Thirty hours.

Medicine and Clinical Medicine (including Pediatrics, Neurology, Psychiatry, and Dermatology):—Three hundred and fifty hours.

Surgery and Clinical Surgery (including Operative Surgery, Orthopædic Surgery and Urology):—Three hundred hours.

Obstetrics and Gynæcology:—Ninety hours.

SIXTH YEAR.

This, the final year of the Six Year Course, will be given for the first time during the session of 1924-25 and will be devoted almost entirely to hospital work in the clinical subjects begun in the Fifth Year. The student will act as a clinical clerk, or externe, in a rotating service under supervision, and will at the same time be given certain instruction by clinics and lectures.

REQUIREMENTS FOR DEGREES.

I. FOR THE DEGREE OF M.D., C.M.

1. No one will be admitted to the degree of Doctor of Medicine and Master of Surgery who shall not have attended lectures for a period of five eight-month sessions in this University, or some other university, college or school of medicine, approved by this University. Students of other universities, so approved, who may be admitted on production of certificates to a like standing in this University shall be required to pass an examination in primary subjects, and all examinations in the final subjects in the same manner as students of this University.

2. Candidates for final examination shall furnish testimonials of attendance on the following branches of medical education; provided, however, that testimonials equivalent to, though not precisely the same as those stated, may be presented and accepted:—

Biology, General Chemistry, Practical Chemistry, Physics, Histology, Embryology, Anatomy and Practical Anatomy, Physiology and Practical Physiology, Organic Chemistry, Biological Chemistry, Physiological Chemistry, Pharmacy, General Pathology, Bacteriology, Clinical Microscopy, Pharmacology, Therapeutics, Medical Jurisprudence, Hygiene and Public Health, Medical and Surgical Anatomy, Operative Surgery, Special Pathology, Morbid Anatomy, Clinical Chemistry, Principles and Practice of Surgery, Clinical Surgery, Theory and Practice of Medicine, Clinical Medicine, Obstetrics and Diseases of Infants, Gynæcology, Pediatrics, Mental Diseases, Ophthalmology, Oto-Laryngology.

They must also produce certificates of having assisted at six autopsies.

3. No one will be permitted to become a candidate for the degree who shall not have attended at least one full session at this University.

4. Every candidate must give proof of having attended during at least twenty-four months the practice of the Montreal General Hospital or the Royal Victoria Hospital, or some other hospital of not fewer than 100 beds, approved by this University.

5. **He must give proof of having acted as clinical clerk for six months** in Medicine and six months in Surgery in the wards of a general hospital recognized by the Faculty, and of having reported at least ten medical and ten surgical cases.

6. He must also give proof of having attended for at least nine months the practice of the Montreal Maternity or other lying-in hospital approved by the University, and of having acted as assistant for at least twenty cases.

7. Every candidate for the degree must, on or before the 30th day of April, present to the Dean of the Medical Faculty testimonials of his

qualifications, entitling him to an examination, and must at the same time deliver an affirmation or affidavit that he has attained the age of twenty-one years.

8. The examination to be undergone by the candidate shall be in the subjects mentioned on pages 284 and 285.

9. The following oath or affirmation will be exacted from the candidate before receiving his degree:—

Ego, A—— B——, Doctoratus in Arte Medica titulo jam donandus, Sancto coram Deo cordium scrutatore, spondeo:—me in omnibus grati animi officiis erga hanc Universitatem ad extremum vitæ halitum persevaturum; tum porro artem medicam caute, caste et probe exercitaturum et, quod in me est, omnia ad ægrotorum corporum salutem conducentia cum fide procuraturum: quæ denique inter medendum visa vel audita silere conveniat, non sine gravi causa vulgaturum. Ita præsens mihi spondenti adsit Numen.

II. FOR THE DEGREE OF BACHELOR OF SCIENCE IN MEDICINE.

The requirements for this degree are as follows:—

1. Honour standing in the examinations in any two of the following subjects:—Anatomy (including Histology and Embryology), Physiology, Biochemistry, Pharmacology and Pathology.

2. In addition to the regular undergraduate courses in Medicine, 240 hours of specialized study in a third one of these subjects, under the guidance of the department concerned and approved by the B.Sc. (Med.) Committee. In the examinations in the special subject honour standing will be exacted.

Candidates are strongly recommended to acquire a reading knowledge of both German and French, and their attainments, as shown by their record in the class lists in the undergraduate course, must be distinctly above those of the average student.

EXAMINATIONS.

Frequent oral examinations are held to test the progress of the student, and occasional written examinations are given throughout the session.

Class examinations are held during the session in each of the First Year subjects, the marks obtained being added to the total marks obtained at the final examinations.

Any student of the First Year whose work at the end of the first term is judged to have been unsatisfactory may be asked to leave the University.

If the standing obtained by any student in the class examinations is not satisfactory, he shall not be permitted to take the final examinations.

A minimum of 50 per cent. in each subject is required to pass and 75 per cent. for honours.

The work of one session must be completed and all examinations passed before a student is permitted to advance to the next.

Students who fail at the regular examinations in not more than three subjects of the First or Second Year and in not more than two subjects in the Third and Fourth Years, may, at the discretion of the Faculty, be allowed to take the supplementary examinations before the beginning of the following session. These examinations will be held during the week preceding the regular opening of the session.

Students who fail to pass in a subject in which practical work is required may, at the discretion of the examiner, be required to repeat the course and furnish a certificate of attendance thereon.

Students who fail in one subject only of the final year may, at the discretion of the Faculty, be allowed a supplementary examination in that subject. Should the subject be one in which practical or clinical work is required, the student must furnish a certificate of additional hospital attendance or laboratory work before presenting himself for examination.

Students who fail at the examination held at the end of the first term may, at the discretion of the examiners, be granted supplemental examinations at a period not less than three months after the regular examinations.

A student who, after being registered in the First, Second, Third or Fourth Year for three successive sessions, fails to qualify for advancement, or who, after being registered in the final year for three successive sessions, fails to qualify for the degree, shall not be permitted to register again as a student of Medicine in the University.

Applications for supplemental examinations must be in the hands of the Registrar at least three days before the day set for the beginning of the examination, and they must be accompanied by a fee of $5.00 for each subject.

DOUBLE COURSES.

B.A., M.D.

The degrees of B.A. and M.D. may be obtained in eight years, of which the first two shall be taken in the Faculty of Arts, and the remaining six in the Faculty of Medicine. The course in Arts is as follows:—

First Year:—As for the First Year of the B.A. course.

Second Year:—**Any five of the following:**—

Economics 1, History 2, English 4, French 2 (Continuation subject), **German 5** (Continuation subject), **Hebrew 1, Latin 2** (Continuation subject), *or* **Greek 2** *or* **4** (Continuation subject), **Philosophy 2, Mathematics 3** *or* **4** (Continuation subject), **Political Science 2, Psychology 1.**

The B.A. degree will be conferred on the completion of the Second Year in Medicine.

B.Sc.M.D.

This course in the physical and biological sciences is specially devised for students who might wish to proceed to a degree in Medicine or to advanced work in physiology, biological chemistry, pharmacology or allied subjects.

Graduates in this course are qualified to enter the Third Year in the Faculty of Medicine.

First Year.

English 1 and 2, German 3, Mathematics 1 *or* **2.**
Physics 1, Chemistry 1, French 12.

Second Year.

German 4 *or* **French 2, Physics 2,**
Botany 1.
Zoology (as in First Year Medicine), **Chemistry 3.**

Third Year.

Chemistry 2 and 4, General Physiology (as in Second Year Medicine).
Zoology 4 and 7, Physics 3A, Botany 4.
Histology and Embryology (as in Second Year Medicine).

Fourth Year.

Chemistry 7 and 10, Anatomy (as in Second Year Medicine) *or* **Special Advanced Biology.**
Physiology (as in Second Year Medicine).

COURSES OF LECTURES.

BIOLOGY

The course in Biology for Medical students is conducted, conjointly, by the University Departments of Botany and Zoology. It consists of three parts:—

Part I. (The Microscope).

PROFESSOR OF BOTANY:—FRANCIS E. LLOYD.
ASSISTANT PROFESSOR:—GEORGE W. SCARTH.

This part of the course deals with the rationale and simple technique of microscopic vision, including both light and dark field illumination. Twelve lectures and twelve laboratory periods (three of each per week during the first month of the session).

Part II. (Zoology).

PROFESSOR OF ZOOLOGY:—ARTHUR WILLEY.
ASSISTANT PROFESSOR:—J. STAFFORD.
LECTURER:—M. NOTKIN.

The course in elementary zoology is that part of the premedical curriculum which introduces the student to some of the terms and principles of animal biology. The manner in which the leading functions of the body are performed in a number of selected types is explained, thereby preparing the mind for the reception of the more advanced instruction in human anatomy and physiology.

Text-Book:—Wells and Davies.

Part III. (General Biology).

PROFESSOR:—FRANCIS E. LLOYD.
ASSISTANT PROFESSOR:—GEORGE W. SCARTH.

This part of the course is a continuation of Part I. It consists of laboratory training in elementary general biology, dealing more especially with those aspects of the field best illustrated by plans; and of lectures based upon the laboratory experience.

Lectures, three per week, and laboratory periods, three (each of three hours) per week, from the close of Part II of the course to the end of the session.

GENERAL AND ORGANIC CHEMISTRY.

PROFESSOR:—R. F. RUTTAN.

ASSOCIATE PROFESSOR:—N. N. EVANS.

ASSISTANT PROFESSOR:—W. H. HATCHER.

DEMONSTRATORS:—D. M. MORRISSON. D. K. CHARLTON. A. CAMBRON. G. W. HOLDEN.

Instruction in General and Organic Chemistry for students in Medicine is given during a portion of each of the first two years.

First Year.—During the First Year the principles governing chemical action are studied in a systematic laboratory course. A printed synopsis of the work of each day is provided and necessary explanations given before beginning the work. The course includes a study of chemical phenomena; the preparation and properties of typical elements and compounds; the laws of chemical action; gravimetric and volumetric determinations, and a short course in qualitative analysis. The student is required to pay special attention to the keeping of an accurate record of his observations and calculations.

Note-books for this purpose are provided and are examined and criticized by the demonstrators. Test examinations are held during the session.

During this year a course of experimental lectures in general chemistry is given; three per week, with frequent reviews and examinations. This course is designed to familiarize the student with the characteristics of chemical action and the conditions which modify it, rather than a detailed study of the preparation and properties of the elements and their compounds. The course includes the elements of physical chemistry and simple calculations. The application of chemistry to medicine is made especially prominent. An examination in general chemistry is held at the end of the session.

Second Year.—A short introductory course of three lectures per week in organic chemistry is given during the first term. This forms a preparatory course leading up to the more complete study of organic substances of biological importance during the second term in the course on biological chemistry.

Students will find it greatly to their advantage to have a practical knowledge of elementary chemistry before entering upon the study of Medicine. Graduates in Arts of recognized universities, on presenting certificates of having taken courses in theoretical and practical chemistry, and of having passed examinations in the same, may be exempted from the chemistry of the First Year.

Text-books:—General Chemistry—General Chemistry for Colleges (new edition), Alex. Smith; Organic Chemistry, Remsen.

PHYSICS.

PROFESSOR OF PHYSICS:—A. S. EVE.

ASSISTANT PROFESSORS:—H. E. REILLEY. D. A. KEYS.

DEMONSTRATORS:—VIOLET HENRY. R. J. CLARK. R. A. SMITH.

First Year.—This course is given in the Physics Building of the University. It consists of four lectures and two laboratory periods of two hours per week throughout the session.

The lectures are experimental in character, especially designed to meet the requirements of students in Medicine. The course includes a study of energy, simple machines, properties of matter, fluid pressures, fluid motion, capillary phenomena; production, transmission and interpretation of sound; temperature and temperature measurements, gas laws and kinetic theory, heat capacity, latent heats, laws of vaporization, humidity measurements, heat conduction; elements of magnetism, laws of electrostatics, electrostatic induction and condensers; primary batteries, Ohm's law and its applications, measurements of resistance and electromotive force, measuring instruments, magnetic effects of current, induced currents, induction coil, conduction through gases, properties of cathode rays and X-rays; radioactive substances and their radiations; laws of reflection and refraction of light, mirrors, lenses and combinations, microscopes, telescopes, spectra, spectrum analysis, colour interference, crystallography, polarized light and saccharimetry.

In the laboratory the student learns the use of such instruments as the balance, vernier, spherometer, hydrometer, hygrometer, spectroscope, saccharimeter, electroscope. Verifications are made of Archimedes' principle, Boyle's law, laws of reflection and refraction, Ohm's law, etc. Measurements are taken of specific gravities, frequencies, specific heats, latent heats, electrical resistances, focal lengths, besides qualitative experiments illustrating the more important physical principles.

Students entering McGill University in all faculties receive lectures and do laboratory experiments in Physics, hence a good knowledge of arithmetic, algebra and geometry is required.

A knowledge of the elements of trigonometry, logarithms, mechanics and physics enables a student to make a good beginning on entry, which stands him in good stead for the remainder of his college career.

Text-Book:—Duff's Text-book of Physics,—Blakiston's.

ENGLISH.

The course in English will be conducted in the Faculty of Arts and will cover the following:

ENGLISH 1: **English Composition:** Class discussions of words, sentences, paragraphs, whole compositions, including the various types of English prose, narration, description, exposition and arguments. The object of this course is to train students to write English with correctness, clearness and facility. Constant practice in writing is required. The class is divided into sections of not more than forty. On the last lecture hour of each month the sections are brought together for a general discussion and review. Individual conferences or tutorial meetings with the instructor, or an assistant, are required at least every fortnight.

ENGLISH 2: **English Literature:** Two hours a week and a third hour at the pleasure of the department. The object of this course is to give the student a general background knowledge of English literature from Chaucer to the present time. A large amount of illustrative reading is prescribed. Individual conferences or tutorial meetings with an assistant are required at least every fortnight; these conferences include discussions and examination questions on the readings and lectures.

ANATOMY.

THE ROBERT REFORD PROFESSOR:—S. E. WHITNALL.

ASSOCIATE PROFESSOR OF HISTOLOGY AND EMBRYOLOGY:—J. C. SIMPSON.

LECTURER IN HISTOLOGY:—W. M. FISK.

LECTURER IN EMBRYOLOGY:—F. SLATER JACKSON.

LECTURER IN ANATOMY:—I. MACLAREN THOMPSON.

LECTURER IN CHARGE OF DENTAL STUDENTS:—H. E. MACDERMOT.

SENIOR DEMONSTRATOR (in Charge of Dissecting Room):—
A. D. CAMPBELL.

DEMONSTRATOR IN HISTOLOGY AND EMBRYOLOGY:—IVAN PATRICK.

DEMONSTRATORS:

F. J. TEES.	J. G. W. JOHNSON.
L. H. MCKIM.	A. ROSS.
H. BRUCE MALCOLM.	L. L. REFORD.
G. A. FLEET.	F. N. K. FALLS.
H. M. YOUNG.	A. J. MARTIN.

PROSECTOR:—MR. WILLIAM MUIR.

Under the six-year curriculum the student begins the study of anatomy in the Second Year of his course, and continues it in the Third, Fourth and Fifth Years. During the Second and Third Years the whole body is dissected twice. The aim of this part of the course is to establish the essential foundations upon which the practice of medicine and surgery is based; the importance of the application to the living body of the knowledge gained in dissection is, therefore, emphasized throughout. During the Fourth and Fifth Years the subject is considered from the standpoint of its clinical bearing. Close co-operation between the anatomical, histological and embryological parts of the course is maintained during the whole four years.

Second Year.

1. **Elementary Anatomy**:—The student dissects the whole body, including the brain, aiming at a general knowledge of the form and relations of the systems and organs without detailed consideration. Stress is laid upon the importance of function in determining form and structure, and the osteology and surface anatomy are studied concurrently.

Whole session, 330 hours.

Text-books:—Gray's "Anatomy" (English edition); Walmsley's "Practical Anatomy."

2. **Histology and Embryology**:—A course of lectures and practical work on the general problems of development and on the early stages of development of the human embryo and a detailed study of the microscopic structure of the tissues and organs of the human body.

Whole session, 180 hours.

Text-book:—Jordan, "Text-book on Histology."

Reference books:—Kellicott, "Text-book of General Embryology"; Prentiss and Arey, "Text-book of Embryology."

Third Year.

3. **Advanced Anatomy**:—The whole body is dissected for the second time and in detail. In this year regional and cross-section anatomy receive special attention and, in correlation with courses 5 and 6, the nervous system and sense organs are further studied.

Whole session, 360 hours.

Text-book:—Gray's "Anatomy" (English edition).

4. **Special Histology**:—(During 1923-24 only.) This course runs parallel with the course in gross anatomy, the microscopic structure of the organs and systems being studied at the time they are dissected.

Whole session, 90 hours.

Text-book:—Jordan, "Text-book of Histology."

5. **Organogenesis**:—The development of the organs and systems of the human body, co-ordinating with courses 4 and 5.

Whole session, 30 hours.

Text-book:—Prentiss and Arey, "Text-book of Embryology."
Reference:—"Reference Handbook of Medical Sciences," new edition, 1922, Keibel and Hall.

Fourth Year.

6. **Surgically Applied Anatomy:**—This course is given in January and February, immediately preceding the course in Operative Surgery on the cadaver, which is conducted in the dissecting room by the Department of Surgery. Second trimester, 30 hours.

Fifth Year.

7. **Medically Applied Anatomy:**—An optional course of eight lecture periods. Second trimester, 8 hours.

Collateral Reading:—The following books are recommended for collateral reading by students in the department:—

Ranson, "Anatomy of the Nervous System" (Third Year).
Keith, "Human Embryology and Morphology" (Third Year).
Treves and Keith, "Surgical Applied Anatomy," or
Davis, "Applied Anatomy" (Fourth Year).
Hilton, "Rest and Pain" (Third or Fourth Year).
Whitnall, "The Human Orbit."

Dictionary:—Every student is advised to provide himself with a good medical dictionary as an essential part of his text-book equipment. Any one of the following may be recommended:—Stedman, Dorland, Gould, Lippincott's, American.

Alternative Text-books:—Although the text-books mentioned in connection with the courses are recommended, any of the following may be used:—

Anatomy:—Cunningham, "Text-book of Anatomy"; Morris, "Human Anatomy"; Piersol, "Human Anatomy"; Quain, "Elements of Anatomy." *Practical Anatomy:*—Parsons and Wright, "Practical Anatomy"; Heisler, "Practical Anatomy"; Cunningham, "Manual of Practical Anatomy." *Anatomical Atlases:*—Sabotta and McMurrich; Toldt; Spalteholz. *Embryology and Histology:*—Schafer, "Essentials of Histology"; Piersol, "Normal Histology"; Bailey, "Text-book of Histology"; Lewis and Stohr, "Text-book of Histology"; Bailey and Miller, "Text-book of Embryology"; McMurrich, "The Development of the Human Body."

Post-Graduate Study.

Material and preparations for post-graduate study are always available, and a special effort will be made to assist graduates in the investigation of any part of the subject in which they are interested.

Physical Anthropology.

The Department is prepared to give a course of special instruction in the methods and application of this subject.

Dental Anatomy.

Details of the courses in Anatomy and Histology for dental undergraduates and graduates will be found in the Announcement of the Faculty of Dentistry.

GENERAL PHYSIOLOGY.

PROFESSOR:—FRANCIS E. LLOYD.

ASSISTANT PROFESSOR:—GEO. W. SCARTH.

On the structure, properties and behaviour of protoplasm. Sixty hours during the first semester, for the students of the Second Year.

Reference Books:—Verworn, General Physiology (translation by Lee); Bayliss, Principles of General Physiology; Bechhold, Colloids in Biology and Medicine (translation by Bullowa); McClendon, Physical Chemistry of Vital Phenomena.

PHYSIOLOGY.

THE JOSEPH MORLEY DRAKE PROFESSOR:—JOHN TAIT.

LECTURERS:—F. GREEN, G. J. CASSIDY, N. GIBLIN.

ASSISTANT:—S. W. BRITTON.

DEMONSTRATORS:—JOHN C. ARMOUR, G. A. FLEET, R. B. MALCOLM.

The purpose of this course is to make the student thoroughly acquainted, so far as time permits, with modern physiology, both from a scientific and practical standpoint—its methods, its deductions, and the basis on which the latter rests.

1. UNDERGRADUATE COURSE IN PHYSIOLOGY

This course, which lasts two years, comprises lectures, demonstrations, laboratory work and hospital clinics.

Lectures:—These extend over two years and are illustrated by diagrams and lantern demonstrations.

Demonstrations:—Special demonstrations are given from time to time on such subjects as cannot be dealt with by individual groups of the practical class, and also on whatever research work is being carried out in the Department.

Laboratory Work:—(a) Juniors. First year students work for the most part in pairs for one period of three hours per week throughout the year. The course comprises experiments on blood, on connective and epithelial tissue, on muscle, nerve, heart, blood-vessels and central nervous systems. Frog material is largely used for the latter part of this course.

Class Book:—Schafer's "Experimental Physiology."

(b) Seniors. Second year students, working in pairs or in larger groups, attend for one period of three hours per week throughout the year. The course includes mammalian operative work as well as observations on the human subject with clinical and other apparatus.

Class Book:—Sherrington's "Mammalian Physiology."

Hospital Clinics:—Along with the formal instruction in physiology clinical demonstrations are given in the hospital theatres on patients. The object of these demonstrations is to show the relation of physiology to symptoms of disease in the human subject.

2. Advanced Physiology.

In this course certain branches of the subject will be selected for more detailed treatment because of their special medical or scientific interest. It is proposed this session to treat among other subjects the lymphatic system and vascular lining, cerebro-spinal fluid, central nervous system and endocrine glands.

Professor Tait and Staff.

3. Structure and Function.

This course includes a review of modern work in biology in which structure, whether of the developing or of the adult animal, has been investigated by experimental means. The aim is to show the scope and place of physiology and of physiological method in relation to such problems. A special study will be made of structural adaptations to physically new environment.

Professor Tait.

4. Blood and Circulation.

This course, designed in part for clinicians, will include lectures, laboratory work and demonstrations. The following questions will receive consideration:—Life-history of the corpuscles, hæmoglobinometry, hæmocytometry, hæmolysis, blood transfusion, coagulation and arrest of hæmorrhage, cytology of the cerebro-spinal fluid, methods of recording pulse and blood pressure, electrocardiography and experiments on the excised heart and vessels.

Drs. Green, Cassidy and Giblin.

5. Physiological Colloquium.

This meets weekly and is limited to those engaged in research in the department.

6. Tutorial Class.

This class is held in connection with advanced graduate reading.

Professor Tait.

STUDENTS' PHYSIOLOGICAL SOCIETY.

Both undergraduate and graduate students will find it of advantage to become members of the Students' Physiological Society. In addition to the privilege of hearing from time to time addresses on special departments of the subject, members are entitled to consult and to borrow books of the library of the Society, which contains many standard text-books and special works.

RESEARCH WORK.

For particulars and facilities relating to research work in physiology, and for subjects of theses required in connection with the degrees of M.A., M.Sc., Ph.D. and D.Sc., application should be made to the professor.

BIOCHEMISTRY AND PATHOLOGICAL CHEMISTRY.

PROFESSOR:—A. B. MACALLUM.
ASSISTANT PROFESSOR:—GEORGE ERIC SIMPSON.
DEMONSTRATOR:—J. F. LOGAN.
LECTURERS ON PATHOLOGICAL CHEMISTRY:—E. H. MASON. I. M. RABINOVITCH.
ASSISTANT DEMONSTRATORS:—H. F. H. EBERTS. MARY C. CHILDS. A. B. ILLIEWITZ. G. J. STREAN.

Beginning with the Session 1924-25 the course in Biochemistry will be given entirely in the Third Year instead of being divided between the Second and Third Years as previously.

During the Session 1923-24 the course—three lectures and six hours of laboratory exercises per week—is for those students of the Third Year who have already taken the course in Biochemistry of the Second Year of the six years' curriculum and will be given in the second term.

This course will deal with (*a*) the origin, character, and the active properties of the various ferments of the digestive tract, (*b*) the chemical and physical processes involved in, and the products resulting from, the digestion, absorption and assimilation of the foodstuffs in the human body, (*c*) the intermediate and ultimate products of metabolism, and (*d*) the chemistry of the tissues and of blood, bile and urine.

In the laboratory course the exercises will deal with the practical side of the subjects treated in the lecture course, such as the digestion of starch, fats and proteins, the absorption and assimilation of fats, the metabolism of the carbohydrates absorbed, and of the products of protein digestion. Especial attention will be given to the methods of the qualitative determination of the more important metabolites, such as urea, uric acid, creatine, creatinine, etc.

In addition to the written and practical examination exacted of each student in this course, oral examinations will be held and the results thus obtained will, with those from the written and practical tests, serve to determine the standing of the student in the class list in Biochemistry for the year.

A course of two lectures and four hours of laboratory exercise per week on Pathological Chemistry will be given in the second term to students of the fourth year of the six years' curriculum. This will cover the metabolism of febrile conditions, deficiency diseases, diabetes mellitus, nephritis, hepatic disorders, etc. The laboratory work will include the more exact methods of the determination of the constitutents of the blood and urine in health and disease. This course must be taken by all candidates for the Sutherland Medal.

Text-books:—Cole: Practical Physiological Chemistry.
Halliburton: Essentials of Chemical Physiology.
Plimmer: Practical Organic and Biochemistry.
Folin: Laboratory Manual of Biological Chemistry.
Hawk: Practical Physiological Chemistry.
Reference:—Robertson: Principles of Biochemistry.
Von Furth: Chemistry of Metabolism.
Bayliss: Principles of General Physiology.

PATHOLOGY AND BACTERIOLOGY.

STRATHCONA PROFESSOR:—HORST OERTEL.
ASSOCIATE PROFESSOR OF PATHOLOGY:—L. J. RHEA.
ASSOCIATE PROFESSOR OF PARASITOLOGY:—J. L. TODD.
ASSISTANT PROFESSOR OF BACTERIOLOGY:—A. A. BRUERE.

LECTURERS.—M. E. ABBOTT. C. T. CROWDY. J. W. SCOTT.

LECTURER AND DOUGLAS FELLOW IN PATHOLOGY:—T. R. WAUGH.

ASSISTANTS AND DEMONSTRATORS:—M. H. DAWSON. H. LeR. DAWSON. G. F. SKINNER. A. L. WILKIE. H. T. C. WHITLEY. L. C. REID.

PATHOLOGY.

1. General pathology and pathological anatomy, including infection and immunity: lectures and experimental demonstrations twice weekly throughout the session. Professor Oertel.

2. Laboratory course in general pathological anatomy and histology, two hours twice weekly, winter term. Professor Oertel and Demonstrators.

3. Special pathology and pathological anatomy: lectures on the diseases of the more important systems and organs, followed by demonstrations, two hours once weekly, throughout the session. Includes the circulatory, hæmatopoietic, respiratory, digestive and renal systems. Professor Oertel and Demonstrators.

4. Practical Pathology: Demonstration and discussion of anatomical and bacteriological material in relation to clinical cases. Professor Rhea.

5. Demonstrations upon fresh autopsy material, once weekly. Professor Rhea, Dr. Crowdy, and Dr. Scott.

6. Performance of autopsies. Professor Oertel, Professor Rhea, Dr. Crowdy, Dr. Scott and Demonstrators.

7. Clinical pathological conferences at the Royal Victoria and Montreal General Hospitals, once weekly. Clinical and Pathological Staffs.

8. Selected chapters of special pathology with demonstrations; includes the nervous system, bones, joints, glands of internal secretion. Dr. Abbott and Dr. Crowdy.

9. Pathological research (open to graduates) by appointment. Professor Oertel and Professor Rhea.

Reference books:—Oertel, General Pathology; Virchow, Cellular Pathology; Cohnheim, Lectures on Pathology; Ziegler, Specielle Pathologie; Delafield and Prudden, Text-book of Pathology; Wells, Chemical Pathology.

Bacteriology.

1. Laboratory course in bacteriology, with explanatory lectures and demonstrations, autumn term. Professor Bruère, Demonstrators and Assistant Demonstrators.

2. Bacteriological and immunological research (open to graduates). Professor Oertel and Professor Bruère, by appointment.

Reference books:—His and Zinsser, Muir and Ritchie; Jordan; McFarland; Mallory and Wright.

Parasitology.

Professor John L. Todd.

The main feature of this course is a series of twenty-five lectures and demonstrations, illustrated by lantern slides, and by specimens both gross and microscopical. Demonstrations of special methods used in the study of animal parasites are given in the laboratory.

Text-books:—Manson, Tropical Diseases (London, 7th Edition, 1921); Stitt, Practical Bacteriology, Blood Work and Animal Parasitology (Philadelphia, 6th Edition with Clinical Notes, 1921); Chalmers and Castellani, Manual of Tropical Medicine (London, 3rd Edition, 1919).

Works of Reference:—Byam, The Practice of Medicine in the Tropics (London, 1921).

GRADUATE COURSES FOR HIGHER DEGREES.

See page 360.

PHARMACOLOGY.

PROFESSOR:—

ASSOCIATE PROFESSOR:—R. L. STEHLE.

LECTURER IN CLINICAL PHARMACOLOGY:—D. S. LEWIS.

LECTURER:—WESLEY BOURNE.

DEMONSTRATORS:—C. C. STEWART. E. LOZINSKY. G. C. ANDERSON.

Third Year.

Materia Medica and Pharmacy: Demonstrations by the Professor of Pharmacy.

Fourth Year.

Chemistry of drugs and poisons: Laboratory course with supplementary lectures and demonstrations. Chemistry of alkaloids, glucosides and special drugs. Assistant Professor Stehle and Assistants.

Pharmacology: Laboratory course correlated with systematic lectures, demonstrations and conferences. Action of drugs and poisons upon normal and abnormal organisms. Includes: general principles (absorption, excretion, mode of action, tolerance, hypersensitivity, synergism, antagonism and relation of chemical structure to action); etiotropic action (antiseptics and specific chemotherapy); organotropic action (effects of drugs upon nervous, digestive, circulatory systems, etc., individual organs and internal metabolic processes). Assistant Professor Stehle, Drs. Mason, Bourne, Lewis and Moyse.

Fifth Year.

Clinical Pharmacology: Systematic lecture course on principles of therapeutics and the applications of drugs in internal medicine, surgery, gynæcology and the specialties. Dr. Lewis and Bourne.

Sixth Year.

Practical Clinical Pharmacology: In co-operation with the Department of Medicine. Ward classes and clinics in both the Montreal General and the Royal Victoria Hospitals. Dr. Lewis and Dr.....

Anesthesia: Practical instruction in Anesthesia is given by Dr. Hepburn at the Montreal General and Dr. Howell at the Royal Victoria Hospitals.

Physical Therapy: Practical instruction by Dr. Harvey and by Dr. Norman Brown in the out-patient departments of the Montreal General and the Royal Victoria Hospitals.

Research: The department is located on the fifth floor of the new Biological Building and is especially equipped for investigation. Suitably prepared persons may undertake research at any time throughout the year.

HIGHER DEGREES.

Advanced courses leading to the degrees of M.Sc., Ph.D. or B.Sc. Med. are arranged to suit individual cases. See page 430.

Text-books:—Cushny, "Useful Drugs."

Reference:—Sollman, Edmunds & Cushny, Bastedo, Jackson, McGuigan, B.P., U.S.P., "New and Nonofficial Remedies."

HYGIENE.

STRATHCONA PROFESSOR:—T. A. STARKEY.

ASSISTANT PROFESSORS:—R. ST. J. MACDONALD. F. B. JONES.

The instruction in hygiene given to the medical undergraduates has been carefully designed to meet the requirements of the practitioner in medicine. It relates chiefly to the investigation of the causes of disease, the channels of transmission and the adoption of modern preventive measures—all problems which are likely to confront the medical man daily in the prosecution of his duties.

Industrial Hygiene forms part of this instruction, and deals with the study of occupational diseases; insanitary conditions in factories, workshops and other industrial establishments; and any other environment connected with the work which may be likely to undermine the health of the work people; work and fatigue; general measures designed to preserve the health of the workmen, and to keep them fit and efficient, both inside and outside the works.

School hygiene forms another part of this course—bringing out the chief points connected with the scope of work and nature of duties of the School Medical Officer, a post so frequently undertaken nowadays by the general practitioner.

Numerous visits of inspection are made by the class to various places and establishments, chosen to illustrate the general principles of sanitation:—Housing and industrial establishments; schools; water and sewage works; refuse destruction; places dealing with food supplies, especially meats and milk; and welfare centres.

The Museum is completely equipped and contains full-sized working models and apparatus illustrative of the application of all hygiene principles See description of Museum, page 517.

An optional practical course more advanced than the one above referred to is open to students wishing to go into greater detail.

The laboratory is provided with all apparatus needed in every branch of public health work. Advanced students are furnished with separate quarters and with every facility for the prosecution of research work.

Text-books:—Parkes and Kenwood; Notter and Firth; Harrington and Richardson; Roseneau, Park.

See pages 317 to 320 for advanced and special courses, and qualifications in Hygiene: suitable for Medical Officers of Health, and others engaged in any branch of Public Health Work.

Lectures are also given by the Department in the Departments of Architecture and Civil Engineering and in the Schools for Graduate Nurses, Social Workers and Physical Education.

MEDICAL JURISPRUDENCE.

PROFESSOR:—D. D. MACTAGGART.

In this course the criminal and civil aspects of legal medicine are taken up and fully discussed, also lunacy and its medico-legal aspects. Special attention is devoted to the subject of blood stains, the chemical, microscopic and spectroscopic tests for which are fully described and demonstrated, also the serum test for the detection of human blood. The modes of action of poisons, general evidence of poisoning and classification of poisons are first treated of, after which the more common poisons are described, with reference to symptoms, post-mortem appearance and chemical tests. The post-mortem appearances are fully illustrated by specimens. Injuries are fully discussed, with reference to their significance, under the Workmen's Compensation Act and Accident Insurance.

Text-books:—Glaister; Buchanan; Mann. *Reference*:—Peterson and Haines; Taylor.

MEDICINE AND CLINICAL MEDICINE.

PROFESSORS.—F. G. FINLEY. C. F. MARTIN.

ASSOCIATE PROFESSOR:—W. F. HAMILTON.

ASSISTANT PROFESSOR:—A. H. GORDON.

LECTURERS:—C. A. PETERS, H. B. CUSHING, A. A. ROBERTSON, J. KAUFMANN, E. H. MASON, D. S. LEWIS, C. F. WYLDE, C. F. MOFFATT.

LECTURER IN IMMUNOLOGY:—FRASER B. GURD.

LECTURERS IN PHYSIO-THERAPY:—F. W. HARVEY. NORMAN BROWN.

DEMONSTRATORS:—J. G. BROWNE, D. W. MCKECHNIE, R. H. M. HARDISTY, D. G. CAMPBELL, A. H. MACCORDICK, E. E. ROBBINS, C. C. BIRCHARD, J. L. D. MASON, D. MACCALLUM, C. R. BOURNE, I. RABINOVITCH, E. V. MURPHY, A. T. HENDERSON, T. A. MALLOCH.

ASSISTANT DEMONSTRATORS:—D. L. MENDEL. C. R. JOYCE. J. J. WALKER. J. C. WICKHAM. W. DE M. SCRIVER. KEITH GORDON.

The object of this course is to impart a sound knowledge of the principles of general medicine in the diagnosis and treatment of disease; to afford a knowledge of the technique and, above all, so to train the student that he will be enabled to cultivate the faculty of critical judgment. The mere instruction, of itself, is regarded as but a part of the course, while the personal contact of students and patients throughout the final years is of prime importance.

Every facility is afforded for this purpose, and students are required to report upon ten patients, placed under their direct care, to a conclusion.

In connection with the laboratory and ward work, minor problems are from time to time presented in order to encourage students in research. This will be further stimulated through closer correlation with the pre-clinical years.

Fourth Year:—The student is taught the methods of clinical medicine by means of demonstrations to the class as a whole, as well as by direct practical work in groups. Students will, from time to time, be allowed the privileges of the wards and the outdoor department for this purpose, and will thus be brought in contact with patients early in their career. This course will last throughout most of the session. In the winter term of this year a course of lectures on the general principles of Medicine will be given.

Fifth Year (Five Years Course):—The instruction in this year will consist of two theatre clinics a week, and work in the wards. Students will be made responsible for the reporting and observation of patients in the wards, and will be expected to demonstrate these cases to the groups who are receiving instruction. A laboratory period of instruction will be given each week in connection with the clinical work, and the tests already learned in the pre-clinical and pre-medical years will now be applied in practice. Students in this year will also be required to attend the outdoor department.

Final Year:—This year is devoted entirely to hospital work, each student acting in the capacity of assistant resident. The number of lectures will be minimal. The student will be made directly responsible for reports on the patients in the wards, for the diaries of the cases, and will be required to make special examinations in company with the Chief in whatever department this is required. He will also attend the outdoor under supervision, and will further be expected to assist at all autopsies concerned with his patients, and will be required to prepare the material for the clinical pathological conference which is held once weekly. Clinics are likewise given on diseases of children, upon neurological cases, infectious diseases, and radiography in the departments concerned.

Text-books:—Osler's Practice; Ander's Practice; Steven's Practice; Rainey and Hutchison; Flint's Auscultation and Percussion; Hewlett's Clinical Pathology; DaCosta, Handbook of Medical Treatment, Forcheimer's Medical Treatment; Butler's Diagnosis; Martinet's Diagnostic Methods.

Reference:—Albutt's System; Osler and McCrae; Oxford Loose Leaf; Nelson's Loose Leaf; Barker's Monographic Medicine; Wood's Reference Handbook of Medical Sciences; Tilney and Riley, Diseases of the Nervous System; Lippincott's New Medical Dictionary; Cattell.

APPLIED IMMUNOLOGY.

Dr. Fraser B. Gurd and Associates.

The purpose of this course is to co-ordinate the work in Pathology and Bacteriology (as given in the Third Year) with the clinical manifestations of diseases due to bacteria, to demonstrate the means at the disposal of the body for the prevention and cure of infection, and the clinical procedures, including the employment of vaccines and sera, which are of value in prophylaxis and treatment.

Fifth Year (Autumn Term):—A course of didactic lectures (with demonstrations).

Sixth Year:—A course of six clinical demonstrations to groups.

Clinical Microscopy.

This course, which is given during the winter term of the Fourth Year, is essentially a practical one given in the Pathological Laboratory under the department of Clinical Medicine. The classes are held twice weekly, each demonstration lasting two hours.

Students are given instruction in the microscopic appearance of various excretions and secretions of the body; films are prepared from urinary sediments, blood, pus, sputum, fæces and gastric contents; as also of fluids obtained by puncture. Complete instruction is given in examination of the blood, on the use of instruments and differential staining methods; pathogenic bacteria and the commoner animal parasites of the body and skin are also shown. Finally, specimens of microscopic interest which appear in Hospital from time to time.

NEUROLOGY.

CLINICAL PROFESSOR:—C. K. RUSSEL.

LECTURER:—F. H. MACKAY.

DEMONSTRATOR:—N. VINER.

A course on Applied Anatomy of the nervous system is given in the earlier years of study.

Lectures and clinical demonstrations on neurology are given in the Fifth and Sixth Years of the course in the wards and theatre.

In the Final Year groups of students are taken into the wards and out-door departments of the General Hospitals. The Psychiatric Clinic at the Royal Victoria Hospital deals, moreover, with patients sent for investigation from the charitable agencies of the city and co-operates with the work of the Canadian National Committee for Mental Hygiene.

A series of demonstrations on neuro-pathology is given in the laboratory.

PSYCHIATRY.

CLINICAL PROFESSOR:—C. A. PORTEOUS

ASSOCIATE PROFESSOR OF PSYCHOLOGY:—WILLIAM D. TAIT.

LECTURER:—G. MUNDIE.

DEMONSTRATORS:—H. A. SIMS.
A. G. MORPHY.

Psychology.

A short course of lectures is given on General and Abnormal Psychology with special reference to the latter. Discussion will include the psychological principles underlying psychotherapy, relation of abnormal to normal mental life, mental hygiene, mental deficiency, intelligence tests and some reference to the psychology of insanity.

Psychiatry.

The course in psychiatry comprises a series of lectures at the University with demonstrations at the Protestant Hospital for the Insane, Verdun, and at the General Hospitals. Clinical instruction is given to groups of senior students, who are required to examine a number of cases, making written reports thereon, followed by discussion.

In the outdoor departments of the hospitals where a psychiatric clinic is held once a week, the students are taught the various methods of testing psychopathic cases, and making detailed diagnoses.

Text-books:—"Outlines of Psychiatry," White; "Clinical Psychiatry," Kraeplin; "Clinical Psychiatry," Diefendorf; "Psychiatric Neurological Examination Methods," Wimmes Hoisholt.

PEDIATRICS.

LECTURERS:—F. M. FRY. H. B. CUSHING.

DEMONSTRATORS:—C. F. WYLDE. W. E. ENRIGHT. GRAHAM ROSS. L. LINDSAY. A. B. CHANDLER.

ASSISTANT DEMONSTRATORS:—H. P. WRIGHT. A. GOLDBLOOM. R. R. STRUTHERS.

A didactic course on the diseases of infancy and childhood, including the feeding of infants, is given during the session to students of the Fifth Year. Clinical and didactic lectures are given on diseases of the new-born at the Montreal Maternity Hospital. In the Montreal General and Royal Victoria Hospitals weekly clinical lectures and ward demonstrations on diseases of childhood will be given to students of the Final Year, and groups of students in rotation will be assigned work in connection with the out-patient children's departments of both hospitals. The new Foundling and Baby Hospital, which has recently been opened, with a capacity of 100 beds, will be utilized during the session for a series of demonstrations in infant feeding.

A voluntary course is given during the summer months, at the Children's Memorial Hospital, to a selected number of students who have successfully passed their Fourth Year.

Text-books:—Holt; Rachford; Koplik; Ruhrah; Chapin and Koplik; Dennett.

DERMATOLOGY.

CLINICAL PROFESSOR:—G. G. CAMPBELL.

LECTURER:—W. P. BURNETT.

The course is entirely clinical, consisting of a weekly theatre clinic, at the Montreal General Hospital, on specially selected cases, and out-door clinics, weekly, by Drs. G. G. Campbell, at the Montreal General Hospital, and W. P. Burnett, at the Royal Victoria Hospital, throughout the session. Lantern slides are made use of to illustrate the course: also a large series of coloured plates and photographs.

Text-books:—Stellwagon, Walker's Introduction to Dermatology, Hartzell, Campbell, Shamberg, Sequira, Sutton.

HISTORY OF MEDICINE.

PROFESSOR.—SIR ANDREW MACPHAIL.

A course of twelve lectures will be given upon the History of Medicine to inform undergraduates in the Faculty upon the progress of the science. It is the intention to examine the causes which produced the varying conceptions of medicine in times past, rather than burden the student with a narration of facts and a recital of biographies.

SURGERY AND CLINICAL SURGERY.

PROFESSOR AND DIRECTOR OF THE DEPARTMENT:—
E. W. ARCHIBALD.

PROFESSOR———————

ASSISTANT PROFESSORS:—A. E. GARROW, A. T. BAZIN,
E. M. EBERTS.

LECTURERS.—{W. L. BARLOW, C. B. KEENAN,
F. A. C. SCRIMGER, F. J. TEES, C. K. P. HENRY.

LECTURERS IN ANÆSTHESIA.—W. B. HOWELL, W. G. HEPBURN.

DEMONSTRATORS:—A. R. PENNOYER, F. MCKENTY,
F. B. GURD, E. C. LEVINE,
GUY JOHNSON.

DEMONSTRATOR OF ANÆSTHESIA:—J. W. ARMSTRONG.

ASSISTANT DEMONSTRATORS:—ALBERT ROSS,
L. H. MCKIM, G. A. FLEET, A. STEWART.

To obtain greater uniformity and a better perspective, the department of Surgery and Clinical Surgery has been placed under one head who has been given control of the teaching in the wards and out-patient departments of the two large hospitals.

Montreal, situated at the head of ocean navigation, and itself a large railroad and industrial centre, is noted for the large amount and varied character of its clinical material. Indeed, the teaching in surgery is largely clinical and practical. In the Montreal General and Royal Victoria Hospitals there are between five and six hundred beds and also large out-patient departments.

During the Fourth Year, students are instructed in the out-patient department. They are brought in immediate contact with the patient, and taught how to make an examination, how to get a correct history, how to differentiate the abnormal from the normal, how to apply their anatomy, to dress wounds, arrange and apply splints, and to reduce the simpler fractures and dislocations. This is a valuable training, as the conditions met in an out-patient department are similar to those that form a considerable part of a practitioner's work.

In the winter term of this year a course of ten lectures on the general principles of surgery will be given.

In the Fifth Year, students attend surgical clinics in the amphitheatre of the hospitals three days in the week. They also attend in the wards of the hospitals in groups. Cases are assigned to them and they are required to examine them carefully, record the conditions found, arrive at a tentative diagnosis, and outline the treatment indicated. A teacher of mature experience and of professorial rank teaches them in the wards and instructs them in groups.

The Final is the purely hospital year. There are three amphitheatre clinics in the hospitals, weekly. Group teaching is carried out in the wards. The patients are assigned to the students in rotation and they are expected to make very careful and thorough examinations in the wards, do their own laboratory work under the direction of a supervisor and to study the natural history, prognosis and methods of treatment.

They are to be present when their cases are operated on and to prepare themselves with all the care and detail of the operating surgeon. Opportunities of assisting are afforded, and also of seeing closely the conditions that are found to obtain.

Students in this year are required to do a good deal of collateral reading and to make themselves familiar with the anatomy, pathology and physiology of the injury or disease and the region implicated.

Every encouragement is given to originality and independence of opinion.

Didactic lectures and laboratory demonstrations on anæsthesia are given in the College by the Department of Pharmacology and Therapeutics, and practical instruction in the administration of anæsthetics is given in the hospital to students of the Fourth and Fifth Years.

Text-books:—Operative Surgery,—Binnie and Burghard; Surgery; A system of Surgery, C. C. Choyce; Rose and Carless, Thomson and Miles, Keen's Surgery; Russell Howard; Ashurst; Da Costa; Emergency Surgery; —Sluss; Surgical Anatomy,—Treves and Keith; Davis' Applied Anatomy; Gask and Williams' Text-book of Surgery; Fitzwilliam's Pocket Surgery. The Treatment of Fractures, Scudder; The Principles and Practice of Surgery, Hanbold.

UROLOGY.

CLINICAL PROFESSORS:—F. S. PATCH. D. W. MACKENZIE.

DEMONSTRATORS:—R. E. POWELL. M. SENG.

Students attend this department in the Royal Victoria and Montreal General Hospitals for instruction in the methods of diagnosis and treatment of surgical diseases of the urinary and male genital organs and syphilis.

During the Fifth Year they are given a course of fifteen lectures on the elements of the subject in the University, followed by fifteen clinics demonstrating typical cases in the Hospitals.

During the Final Year they receive clinical instruction on groups of cases presented for differential diagnosis, and students are required to discuss these cases and outline the treatment indicated.

Clinical clerkships are assigned in the urological wards, where cases are followed to a conclusion. Opportunity is here afforded for the complete study of a considerable number of cases.

Text-book:—Keyes' Urology.

Collateral Reading:—Thompson Walker's Genito-Urinary Surgery; White and Martin's Genito-Urinary Surgery and Venereal Diseases.

ORTHOPÆDIC SURGERY.

CLINICAL PROFESSORS:—A. MACKENZIE FORBES. W. G. TURNER.

DEMONSTRATORS:—J. A. NUTTER. W. J. PATTERSON.

Instruction in diseases and injuries of the bones, joints, muscles and the surgery of deformities, both congenital and acquired, is given to the students of the Fifth Year in groups of ten to twelve in the Children's Memorial Hospital, the Royal Victoria and the Montreal General Hospitals.

Each student attends clinics in Orthopædic Surgery at each of these hospitals for four or five consecutive weeks.

The demonstrations given are essentially practical. Every student is expected to write histories of, to make the diagnoses in, and to prescribe the treatment for a definite number of patients.

In the Montreal General and the Royal Victoria Hospitals there are large clinics for both adults and children suffering from orthopædic affections.

In the Children's Memorial Hospital there is great wealth of clinical material consisting of children who are suffering from the surgical diseases of infancy and childhood.

Text-books:—Whitman's Orthopedic Surgery; Fraser on Tuberculosis of Bones and Joints of Children; Tubby and Jones on Surgery of Paralysis; Jones, Orthopedic Surgery of Injuries; Jones and Lovett, Orthopedic Surgery.

OBSTETRICS.

PROFESSOR OF OBSTETRICS AND GYNÆCOLOGY:—W. W. CHIPMAN.

ASSISTANT PROFESSOR:—H. M. LITTLE.

LECTURERS:—J. R. GOODALL. H. C. BURGESS. J. W. DUNCAN. J. R. FRASER.

DEMONSTRATOR:—W. A. G. BAULD.

This course will embrace: (1) Lectures on the principles and practice of the obstetric art, illustrated by diagrams, fresh and preserved specimens, the artificial pelvis, complete sets of models illustrating the deformities of the pelvis, wax preparations, bronze mechanical pelvis, etc.; (2) bedside instruction in the Montreal Maternity, including external palpation pelvimetry, the management and after-treatment of cases; (3) a complete course on obstetric operations with the Tarnier-Budin phantom; (4) the diseases of infancy; (5) a course of individual clinical instruction at the Montreal Maternity Hospital.

The course is carefully graded and instruction will be given separately to students of the different Years.

Particular attention is given to clinical instruction, and a clinical examination similar to that held in medicine and surgery forms an important part of the final examination.

A few lectures will be given on diseases of the new-born, supplemented by clinical demonstration and ward work. The lecturers and demonstrators will give special courses from time to time in the college and in the hospitals, and will take the students in groups for the purpose of demonstration, examination and review.

In the Fourth Year will be given the regular course of didactic lectures.

The Fifth and Sixth Years will be devoted mainly to practical and clinical work in the wards of the Montreal Maternity and in its externe service. Palpation on the living subject, theatre clinics, ward clinics, and individual instruction in the management of labour and the care of the puerperal patients will be the chief features of the course.

Text-books:—Whitridge Williams, Webster, Evans, De Lee, Berry Hart.

GYNÆCOLOGY.

PROFESSOR OF OBSTETRICS AND GYNÆCOLOGY:—W. W. CHIPMAN.
CLINICAL PROFESSOR OF GYNÆCOLOGY:—F. A. L. LOCKHART.

LECTURERS:—DAVID PATRICK. H. M. LITTLE. H. C. BURGESS. J. R. FRASER.

DEMONSTRATORS:—W. A. G. BAULD. IVAN PATRICK.

The didactic course consists of about twenty-five lectures given twice weekly during the autumn session. The anatomy and physiology of the organs and parts concerned are first discussed. Then the various methods of examination are fully described, the necessary instruments exhibited, and their uses explained. The lectures are illustrated as fully as possible by drawings, morbid specimens and lantern slides.

Clinical teaching, including out-patient and bedside instruction, is given at both the Royal Victoria and Montreal General Hospitals by Professors Chipman and Lockhart, assisted by Drs. Patrick, Little and Burgess. A large amount of clinical material is thus available for practical instruction in this department of medicine. Numerous operations are done before the class and made the subjects of remarks. In addition to the ward-patients, each hospital conducts a large out-patient gynæcological clinic, to which advanced students are admitted in rotation, and instructed in digital and bi-manual examinations and in the use of instruments for diagnosis.

Particular attention is thus given to clinical instruction, and a clinical examination in gynæcology, similar to that held in medicine and surgery, forms part of the final examination.

Text-books:—Hart and Barbour; Blair Bell; Dudley Hurst; Gilliam; Anspach.

OPHTHALMOLOGY.

PROFESSOR:—W. G. M. BYERS.

CLINICAL PROFESSOR:—G. H. MATHEWSON.

LECTURERS:—F. T. TOOKE. S. H. MCKEE.

DEMONSTRATORS:—A. G. MCAULEY. J. A. MACMILLAN.

ASSISTANT DEMONSTRATORS:—J. ROSENBAUM. A. BRAMLEY-MOORE.

In the Final Year there is a didactic course of about ten lectures delivered at the University. The more unusual diseases of the eye are fully described, while the commoner diseases are merely touched on, the fuller consideration of the latter being reserved for the clinical lectures to be delivered in the Final Year. In addition, in the Fifth Year there is instruction in the anatomy of the eye, the methods of examination, and the use of the ophthalmoscope and the elements of refraction.

In the Final Year there is a regular bi-weekly course of clinical lectures at the Royal Victoria and Montreal General Hospitals.

The operative work in eye surgery is fully open to undergraduates on the day set apart for the purpose.

Text-books:—Parsons; May; De Schweinitz; Fuchs.

OTO-LARYNGOLOGY.

PROFESSOR:—H. S. BIRKETT.

LECTURER:—H. D. HAMILTON.

DEMONSTRATORS:—HAMILTON WHITE. J. T. ROGERS.

ASSISTANT DEMONSTRATORS:—D. H. BALLON. R. P. WRIGHT. G. E. HODGE.

The course of instruction in Oto-Laryngology is carried on in the recently constructed wards and out-patient department of both the Montreal General and the Royal Victoria Hospitals, where owing to the large clinics the students are afforded ample opportunity of receiving practical instruction in these subjects. Between these two hospitals there are about fifty beds set apart for this specialty.

The course is carried on only in the final year, and during the session the courses are conducted in small classes, so that personal supervision, which is so essential in this specialty, is accorded to each student.

The clinics are held twice a week in each hospital and continue throughout the session.

The course is based altogether upon the needs of such knowledge as a general practitioner should have regarding these special organs. The student is instructed in the methods of examining the nose, throat and ear; of applying the various tests of hearing; and shown only such cases as he is likely to meet in general practice. The course is completed by a review of lectures upon the more common diseases of nose, throat and ear.

The anatomy of the parts concerned is studied in the student's third year, and reviewed from the surgical aspect in the Fifth Year. A series of dissected preparations is available for post-graduate study in the department of anatomy upon application.

From eight to ten didactic lectures are given only upon the more common conditions met with in these organs in general practice.

At the end of the course an examination is held, which is written and clinical.

Two positions as Resident House-Surgeons in the Department of Oto-Laryngology in both hospitals are open to the members of the graduating class.

Text-books:—Albert Gray; St. Clair Thompson; Porter; H. Tilley; Kerrison; Phillips.

CLINICAL INSTRUCTION.

In the Fourth Year instruction is given to groups in the methods of physical diagnosis and in minor surgery.

During the Fifth Year (five years' course), three medical and three surgical theatre clinics are given weekly in the Montreal General and Royal Victoria Hospitals. In addition, on four days of the week, instruction is given to groups at the bedside, in the laboratories, and in the medical and surgical out-patient departments. Out-patient clinics are given to groups of students once weekly on ophthalmology and oto-laryngology during the last trimester.

The Final Year is devoted almost exclusively to clinical work. There are three clinics weekly in medicine, three in surgery, two in obstetrics and two in gynæcology, these being supplemented by group teaching in the wards and by instruction in the clinical laboratories. In addition, groups receive instruction in ophthalmology, oto-laryngology, pediatrics, dermatology, gynæcology, neurology and genito-urinary surgery in the out-patient department of both hospitals. At the Montreal Maternity four ward classes weekly in obstetrics are given.

CLINICAL CLERKS in the medical and surgical wards of both hospitals are appointed every three months, and each one during his term of service conducts, under the immediate direction of the Clinical Professors, the reporting of all cases in the ward allotted to him. Students are required to show a certificate of having acted for six months as clinical clerk in medicine and six months in surgery, and are required to have reported at least ten cases in medicine and ten in surgery. The instruction obtained as clinical clerk is found to be of the greatest possible advantage to students, as affording a true *practical* training for his future professional life.

DRESSERS are also appointed to the out-door departments. For these appointments, application is to be made to the assistant surgeons, or to the resident surgeon in charge of the out-door department.

The large number of patients affected with diseases of the eye and of the ear, nose and throat, now attending the special clinics at both hospitals, afford ample opportunity to students to become familiar with all the ordinary affections of those organs, and to make themselves proficient in the use of the various instruments used in examining them, and it is hoped that every student will thus seek to gain a practical knowledge of these important branches in medicine and surgery. Operations are performed on the eye and on the ear and nose and throat after the out-door patients have been seen, and students are invited to attend the same, and as far as practicable to keep such cases under observation so long as they remain in the hospital.

There are also special departments in both hospitals for gynæcology, pediatrics, neurology, orthopædics, dermatology and genito-urinary diseases, directed by specialists in these branches. Students are thus enabled to acquire technical knowledge under skilled direction. The plan of teaching practical gynæcology, which has met with marked success, has been the limitation of the number of students attending each clinic to three.

Clinical instruction is given in the wards of the Protestant Hospital for the Insane at Verdun.

The clinical teaching in infectious diseases is given in the wards of the Alexandra Hospital for Contagious Diseases.

HOSPITALS.

The City of Montreal is celebrated for the number and importance of its public charities. Among these its public hospitals are the most prominent and widely known. Those in which medical students of McGill University receive clinical instruction are: (1) The Montreal General Hospital; (2) The Royal Victoria Hospital; (3) The Montreal Maternity Hospital; (4) The Alexandra Hospital for Contagious Diseases; (5) The Protestant Hospital for the Insane; (6) The Children's Memorial Hospital; (7) Montreal Foundling and Baby Hospital.

PHYSICAL EDUCATION.

DIRECTOR:—ARTHUR S. LAMB, B.P.E., M.D.
UNIVERSITY MEDICAL OFFICER:—F. W. HARVEY, B.A., M.D.

All students on entering the University are required to pass a physical examination. They are then divided, according to the result of this examination, into five classes:—

(*a*) Fit for all forms of physical exercise.
(*b*) Fit for a limited number of forms.
(*c*) Fit for gymnasium work only.
(*d*) Fit for remedial gymnastics or temporarily unfit.
(*e*) Unfit for any form of physical exercise.

At the time of his medical examination each student is required to fill in a card indicating his choice of physical activity, which he will be allowed to follow, unless debarred for medical reasons, under which circumstances he will be given a further choice among other recognized but less strenuous forms of exercise or will do gymnasium work as the case may require.

Physical education is compulsory for all students of the first two years. Two periods per week will be devoted to it.

Unexcused absences up to one-eighth of the required number of periods shall be allowed. Unexcused absences exceeding one-eighth, but not exceeding one-fourth, may be allowed if at the end of the session the student passes a special examination and satisfies the Director that he has made sufficient progress. Unexcused absences exceeding one-fourth shall disqualify a student. Such students shall be required to take extra gymnasium class work to the satisfaction of the Director, a supplemental course being given in the month of September for this purpose.

At regular intervals during each session and also at the end of each session, the Director of Physical Education shall furnish the Dean of each Faculty with a list of students who have failed to meet the attendance requirements as laid down in the ordinary curriculum, or who have proved unsatisfactory in other respects, and such cases shall be dealt with by the respective Faculties.

No student in default shall be allowed to proceed to the next year of his course unless for special reasons exemption should be granted on the recommendation of his Faculty and approved by the Committee on Physical Education.

Not less than one month before the conferring of degrees in each session, the Director shall furnish to the Registrar of the University, for transmission to Corporation and the Faculties concerned, a list of all students, being candidates for degrees at the forthcoming Convocation, who have failed to satisfy the requirements of the Committee on Physical Education, and no Diploma for a degree shall be issued to any such candidate unless by the express direction of Corporation.

GRADUATE AND ADVANCED COURSES.

1. LABORATORY COURSES.

Commodious laboratories for advanced work have been equipped in connection with the Pathological and Clinical Departments of both the Royal Victoria and Montreal General Hospitals, and also in connection with the college laboratories for physiology, chemistry, pathology and pharmacology.

Recent graduates of recognized universities desiring to qualify for examinations by advanced laboratory courses, or who wish to engage in special research, may enter at any time by giving notice, stating the course desired and the time at their disposal.

All the regular clinics and demonstrations of both hospitals will be open to such students on the same conditions as to undergraduates in Medicine of this University.

Further details regarding courses, fees, etc., may be obtained on application to the Dean of the Medical Faculty.

2. HYGIENE AND PUBLIC HEALTH.

1. DIPLOMA OF PUBLIC HEALTH (D.P.H.).

Specially designed as a thorough training for those Medical Men undertaking the important duties of Medical Officer of Health.

Every M.O.H. ought to possess this qualification.

Candidates undertaking this course must have possessed a degree in medicine, or other qualifications for practice, for at least twelve months before they are competent to receive the diploma. The courses prescribed are as follows:—

1. A course of lectures dealing in a comprehensive manner with the general principles of hygiene, preventive medicine and sanitation.

2. Bacteriology—a full practical course in General Bacteriology, special attention being given to pathogenic organisms and parasites; general principles of bacteriological analysis, especially in relation to public health matters.

3. Sanitary Chemistry:—(a) Examination of air and air vitiated by respiration, products of combustion, factory and other trade conditions; water and water supplies in general, detection of poisons associated with water supplies; all the common kinds of foods and beverages; sewage and sewage effluents; articles of dress, house decorations, etc.; chemical investigations connected with certain trades and occupations.

(b) Physics:—Principles of statics, pneumatics, hydraulics, light and photometry, heat and thermometry and the principles of hygrometry, only in their application to hygiene.

4. Practical out-door sanitary work:—an extended course under a Medical officer of Health, or other authority, affording facilities for instruction in sanitation relating to housing: factories, workshops and industrial establishments of all kinds; schools; water-works; sewage plants; refuse destruction; abattoirs; dairies and milk stations; places where food is handled or stored, and various welfare centres.

5. Sanitary Legislation and Administration:—Statutes and bye-laws relating to public health: the powers of sanitary authorities: administration of the office of a Medical officer of Health.

6. Vital Statistics:—Calculation and tabulation of returns of births, marriages, deaths and diseases.

7. Meteorology and climatology, also the geographical and topographical distribution of diseases.

Candidates for this Diploma may claim exemption from attendance in any of the subjects outlined in the scheme of studies on presentation of proof that they have received already equivalent instruction in such subjects.

Except in special instances where exemptions may have been granted, the length of the course is eight months—from the beginning of October to the end of May.

The examination for the Diploma includes the following subjects:—Examination of clinical cases at an infectious hospital; the drawing up of outlines for annual and other reports of officers of health; a report upon the sanitary conditions of some actual locality; demonstration of the consideration and use of meteorological, hygienic and sanitary apparatus; microscopical examination of specimens submitted; description of specimens of human and other diseased tissues; the inspection of carcasses of animals to be used for food; chemical and bacteriological examinations, the scope of which is indicated in the paragraphs relating to instruction on these headings.

The above examination is written, oral and practical, and extends over a period of four or five days.

The fee for the course and the Diploma is $100.00.

2. IN INDUSTRIAL HYGIENE.

This course is intended to meet the requirements of those graduates and students who wish to make a complete study of all conditions relating to industrial hygiene.

It comprises occupational diseases; lighting, heating, ventilation, and other sanitary conditions in factories, workshops, and all industrial establishments; effects upon workpeople of environment and conditions relating to particular trades and occupations; offensive trades; investigation of causes tending to undermine the health of workers, or to lessen the output

of work; vital and other statistics relating to industries; principles of preventive measures proved to be the most serviceable in combating these conditions.

Excellent laboratory facilities both for general work, and for any special investigation. Splendid opportunities exist for inspection of industrial establishments both in and around the city.

3. IN SCHOOL HYGIENE.

This course is intended for those medical men wishing to equip themselves for the important duties of School Medical Officer.

Some of the more important studies are:—sanitation of school buildings; school equipment; playgrounds; hygiene of scholars and their inspection; spread of infectious diseases and all preventive measures; open-air schools; and administration.

Provision is made in the new laboratories for carrying out any investigation on any particular subject relating to school hygiene.

Splendid opportunities exist for the practical inspection of schools; and also facilities for becoming acquainted with the routine work of a School Medical Officer.

4 COURSE FOR MEDICAL INSPECTORS OF SCHOOLS.

The course of instruction is designed to give the Medical Officer a thorough grounding in all the conditions relating to the child during the ordinary term of its school life. Not only are the common diseases, ailments, or defects of school children dealt with in a very comprehensive fashion, but, what is equally important, a thorough knowledge of what constitutes a normal child. To this end, therefore, instruction is first directed to the essential points relating to the normal child of school age, as revealed by a complete physical examination and by certain tests of a physiological character.

At entrance to school life it is very important for the Medical Officer to determine the physical and mental fitness of a child to undergo the regular school training.

During the latter phases of school life the progress and development of the school child must be watched to see that they take place on healthy lines. It is necessary, therefore, for the Medical Officer to be thoroughly alive to all these conditions or surroundings, especially in the school, which tend in any way to interfere with, or retard, that development: and to this end a knowledge of the hygiene of the school child and the ability to detect the earliest signs of defect or disease are very essential.

Special instruction is given, therefore, in the following subjects:—

General Medicine, relating more particularly to child life; methods for making and recording complete physical examinations of the child;

the more common diseases of childhood affecting the cardio-vascular lymphatic, pulmonary and nervous systems.

Mental Diseases and Deficiencies.

The study of feeding and nutrition relating to school life.

Orthopedics and school life.

Communicable diseases:—A series of demonstrations at the Alexandra Hospital for infectious diseases, or any other institution, when cases present themselves—chiefly on early diagnostic signs of the various diseases and residual manifestations during convalescence.

Skin diseases:—A course covering the most frequently met with skin conditions, more especially in regard to those which are communicable from one child to another; the prophylaxis, the diagnosis, and the treatment in regard to each.

Oto-Laryngology:—Practical demonstrations will be given, and the subject dealt with under the following headings:—

(*a*) Brief review of the anatomy of the eye, nose, throat and ear.

(*b*) Methods of testing hearing.

(*c*) Examinations of the nose, throat and ear. This will include demonstrations of the normal conditions of these parts, and also of pathological conditions as exemplified by the patients attending clinics. Members of this class must provide themselves with the following instruments:—

(1) Head mirror with brow band attached.
(2) One set aural specula.
(3) Tongue depressor.
(4) Nasal speculum.
(5) Medium sized rhinoscopic mirror.
(6) Laryngeal mirror.

Ophthalmology.—The work will consist, in the first place, of a brief review of the anatomy of the eye, and the physiology of vision. Following this, instruction will be given in the estimation of visual acuity, the recognition of asthenopia and errors of refraction, and the diagnosis of the commoner, more menacing and infectious diseases of the eyes occurring in school children.

Regional Anatomy:—A course embodying the surface markings of the chief organs in the chest and abdomen; the sites of superficial lymph nodes and the areas drained by them, etc., on the living subject.

Hygiene and Sanitation relating to schools (for further information see page 319).

Relationship of School Medical Officer to Public Health Authorities.

Administration:—Visits will be paid to various schools where the work of the Medical Inspection is being carried out, so that not only can the student see how it is done, but also learn what office equipment is required.

LIBRARY.

HONORARY LIBRARIAN:—C. F. WYLDE.
ASSISTANT LIBRARIAN:—MISS JEAN CAMERON.
ASSISTANTS:—MISS PAULINE M. CARRIÈRE. MISS C. DAVIDSON, B.A. MISS PATRICIA BURNS. MISS EDITH GORDON.

"The history of the Library is the history of the Faculty."
Professor Hall.

The Library occupies the central part of the building, the whole front of the second and third floors, as well as a portion of the first floor. On the third floor is the magnificent reading room, 76 x 24 feet, exceptionally well lighted, and capable of accommodating 75 readers. On this floor also are the journal room and private offices. The second floor contains the stack room, the book stacks having a total capacity of sixty thousand volumes.

A special feature of the Library is the journal collection, and every effort is being made to complete this section as far as possible and thus to increase the value of the reference department of the Library.

There is also a great duplicate collection of journals from which distribution can be made on the exchange basis.

There is no printed catalogue, but there has been compiled a comprehensive list of continuations with their inclusive volumes, and this list will be available for out-of-town borrowers.

The Library is for the use of the members of the Teaching Staff, graduates of the Medical Faculty of the University, undergraduate students in the Faculty, graduates from other colleges showing proper credentials, and registered nurses. It is felt that graduates living at a distance are not aware of the fact that books may be borrowed from the Library on payment of carriage both ways.

The Library is closed on Sundays, but is otherwise open daily during term from 9.00 a.m. to 6.00 p.m., except Saturday, when it closes at 5.00 p.m. After June 1st it is open from 9.00 a.m. to 5 p.m., Saturdays, 9.00 a.m. to 1.00 p.m. During July and August it is closed all day Saturday.

McGILL MEDICAL SOCIETY.

The Society is composed of the registered students of the Faculty. Its purpose is:—

(1) To transact all matters of business connected with the undergraduate body.

(2) To stimulate interest along medical lines.

(3) To increase the facility with which the men can express themselves in public.

(4) To give the men an enjoyable social evening, at the same time developing a strong spirit of faculty loyalty.

Meetings are held every alternate Monday at which addresses are given by prominent professional men, medical and otherwise. Case reports are also read and discussed by the members themselves.

The annual meeting is the last meeting in the spring, when the following officers are installed: Hon. President (elected from the Faculty), President, Vice-President, Secretary, Assistant Secretary, Treasurer, Reporter and three Councilmen (of whom two are from the Faculty). These officers are elected by ballot one week before the annual meeting.

A prize competition has been established in the senior and junior subjects. The senior are open to all to write upon, while only students of the first three years are allowed to compete in junior subjects. The papers are examined by a board selected by the Faculty, and two prizes are awarded in each division. The papers are subject to the call of the Executive on December 1st, and must be handed in for examination before February 1st. The Society also controls the Students' Reading Room. English and American journals as well as the leading daily newspapers are kept on file.

DEPARTMENT OF PHARMACY.

GENERAL ANNOUNCEMENT.

The Montreal College of Pharmacy, organized as a teaching body in 1867, for fifty years successfully carried on the work of instructing pharmaceutical students, and for many years it was the only institution in the Province of Quebec offering such instruction.

During the summer of 1916 this College was taken over by McGill University, and a Department of Pharmacy was established in connection with the Faculty of Medicine.

Special instruction on all subjects required by the future Pharmaceutical Chemist is given in the class rooms and laboratories of the University, the students of Pharmacy having access to its splendid equipment.

The work of the Department embraces courses in Botany, Physics, Chemistry and Practical Chemistry, Theoretical and Practical Pharmacy, Dispensing, Materia Medica and Toxicology.

The seventh session of this Department will be opened on Monday, September 24th, 1923.

ENTRANCE REQUIREMENTS.

For entrance into the Department of Pharmacy the University accepts the preliminary examination of the Pharmaceutical Association of the Province of Quebec in default of the B.A. degree or Arts matriculation (B.A.Course), particulars of which will be found in the General Announcement.

The regulations regarding the Preliminary Examination of the Pharmaceutical Association of the Province of Quebec are as follows:

A diploma of Bachelor of Arts, Science or Letters from a Canadian or British University, is accepted in lieu of the preliminary examination. In this case the candidate must register his application with the Secretary of the Association, and produce his diploma, together with personal proof of his identity.

The candidate for the study of Pharmacy must give satisfactory certificates of good morals, as well as identification and a recent photograph duly attested, and he must be a British subject. He is also required to pay the fee in advance. The examination which the candidates undergo embraces the following subjects:—

GROUP I.—LETTERS:—

1. Mother tongue (English or French), grammar, syntax, analysis, composition.
2. Auxiliary language (English or French), translation both ways.
3. Latin—Rules of grammar, translation of two first books of Cæsar.
4. History—Canadian, French, English and United States.

GROUP II.—SCIENCES:—

1. Arithmetic.
2. Algebra and Geometry:—

   Algebra to 2nd degree exclusively.

   Geometry—The two first books of Euclid.

3. Physics and Chemistry:—

   Physics—Elementary knowledge of mechanics, weight, hydrostatics, pneumatics, capillarity, osmosis, optics and heat.

   Chemistry—General knowledge, definitions, the elements, principal laws of chemical reactions, properties of the principal metalloids and their principal compounds.

4. Geography.

For admission the candidate must obtain at least the following percentage in the different subjects:—

Mother tongue and arithmetic, 60 per cent.; other subjects, 50 per cent.; and on the total, 60 per cent.

The candidate who fails in one subject only, of the above groups, either of letters or of sciences, may present himself for examination in that subject at any one of the four subsequent examinations.

The candidate may try for science or letters at different examinations, separately, or for both of these two groups at the one examination. A clear and legible writing is required; any copy which is found hard to read will suffer a loss of 5 per cent. on points.

Fee, $20.00, or $10.00 for each group.

The preliminary examinations for admission are held in Montreal and Quebec, the first Thursday of January and July of each year.

The registration of candidates for the examinations must be made at the office of the Registrar of the Association at least ten days before the date set for the examinations. A blank register form can be obtained from the Registrar, and must be signed by the candidate.

The major and minor examinations are held at Montreal in April and at Quebec in the fall.

EXAMINATIONS.

Examinations in each subject are held at the close of the course. Students who pass in all subjects of the curriculum, as required by the Pharmaceutical Association of the Province of Quebec, will receive the University Diploma of Pharmacy. A minimum of 50 per cent. in each subject is required to pass, and 75 per cent. for honors. The examination requirements of the Pharmaceutical Association of the Province of Quebec for license to practise Pharmacy in the Province are stated on page 13.

PRIZES.

For the session 1923-24 a medal is offered as a prize to the graduate who obtains the highest total percentage over 80 per cent.

TEXT BOOKS RECOMMENDED.

PHARMACY AND PRESCRIPTIONS:—Remington's Pharmacy, Bennett's Medical and Pharmaceutical Latin, Scoville's Art of Compounding, Art of Dispensing, Lucas' Practical Pharmacy.

CHEMISTRY:—Junior and Senior Chemistry.

Reference Book:—Sadtler and Coblentz, Pharmaceutical and Medical Chemistry.

PHYSICS:—Balfour Stewart's Elementary Physics, Ganot's Physics, Peck's Ganot's Physics.

BOTANY:—Gray-Robinson Manual, Kraemer's Applied and Economic Botany.

MATERIA MEDICA:—British Pharmacopœia, United States Dispensatory, Squire's Companion to the British Pharmacopœia, Royal's Materia Medica, Sayre's Organic Materia Medica and Pharmacognosy, Heebner's Synopsis.

COURSES OF LECTURES.

CHEMISTRY.

Two courses will be required for the Diploma in Pharmacy namely, the junior and senior courses.

Junior Chemistry.—This includes elementary physical science and a university course on the general principles of the science of chemistry. A course in elementary physics will be taken with the students in the School of Commerce and will consist of a series of twenty-five lectures on the principles of physics and their application. The course is non-technical and is intended as an introduction and supplementary to the course in general chemistry. The course in general chemistry will consist of three lectures per week, given for the students in Arts and Medicine, on Monday, Tuesday and Thursday, at two o'clock. In addition to these lectures, there will be two laboratory periods each week of two hours, immediately following the lectures on Monday and Thursday. This course in general chemistry is intended to give a thorough grounding in the fundamental principles governing chemical action and the formation of chemical compounds, organic as well as inorganic.

Senior Chemistry.—The senior course in chemistry will be a short course of laboratory work on the identification and separation of organic and inorganic compounds of special importance in Pharmacy, and will include elementary toxicology, the assay of crude drugs, volumetric analysis, analysis of urine, the use of spectroscope, etc.

Both courses of chemistry will be given by Dr. Ruttan and members of the staff of the Department of Chemistry.

PRACTICAL PHARMACY.

Junior.—This course will embrace (1) the preparation of a number of typical examples drawn from the official dilute acids, waters, liquors, plasters, extracts, fluid extracts, mixtures, liniments, oleates, syrups, ointments, etc. (2) General principles to be observed; simple and compound powders, mixtures, emulsions, their nature and preparation; pills and pill coating, gargles, lotions, liniments, suppositories, plasters, ointments, cachets, capsules, tablets and tablet triturates, lozenges and pastilles, lamellae, incompatibility, Pharmacy law.

Senior.—Practical Pharmacy in all its branches will be thoroughly dealt with, the different uses of up-to-date pharmacy being demonstrated. The course will include the following subjects:—Clarification, crystallization, decantation, dialysis, distillation, drug grinding, extraction, filtration, heat, metrology, percolation, precipitation, solution, specific gravity, specific volume and vaporization.

In conjunction with the foregoing, the class will be shown the modus operandi for the manufacture of different preparations of the B. P., and of others, including chemical solutions, elixirs, spirits, plasters, emulsions, ointments, granular effervescent salts, crystal and scale salts of iron, resins, oleo resins, etc.

Particular attention will be given to pharmaceutical assaying, such as opium, ipecac, belladonna, cinchona, nux vomica.

MATERIA MEDICA AND THEORETICAL PHARMACY.

Junior.—This will include instruction in pharmaceutical jurisprudence, poison schedules, weights and measures; classification of the official organic drugs, including leaves, flowers, fruits, seeds, herbs, barks, gums, resins, etc., with the geographical source, parts used, and official preparation of each; posology; theoretical pharmacy (embracing the theories of manufacture of the simple preparations of the B. P., such as medicated waters, syrups, tinctures, compounds, powders, pill masses, etc.); dispensing.

Senior.—Complete classification of all official organic and inorganic drugs, giving, in the former, the mode of collection and preservation, geographical and botanical sources and parts used—and in both instances the constituents and impurities, also the medicinal properties of each, with their preparations; animal drugs, such as pepsin, pancreatin, thyroids, etc., will be dealt with in a similar manner; posology; pharmacognosy; toxicology; theoretical pharmacy (embracing the theories of manufacture of the more complex galenical official preparations; adulterants, impurities and the methods of detection.

BOTANY.

General Botany.—General external morphology of the higher plants (higher cryptogams and phanerogams); anatomy and histology, the latter treated with more especial reference to methods of drug identification by means of the microscope.

General Physiology.—Elementary plant physiology, treated briefly.

Special Botany.—Structure of those plants below the pteridophytes of use or interest to the pharmacist, treated briefly; special morphology of pteridophytes and phanerogams, and their classification. Attention will more especially be given to those families (about 30) of plants chiefly represented in materia medica.

EXAMINATIONS FOR ADMISSION TO THE PROFESSION.

(1) EXAMINATION TO OBTAIN THE CERTIFICATE FOR ASSISTANT PHARMACIST.

To become an Assistant in Pharmacy the candidate must furnish proofs of having registered three years as a student in Pharmacy, also that he has served at least three years under a doctor or druggist duly registered; he must pay the fee required, and pass an examination on the medico-pharmacal sciences, Physics, Chemistry and Pharmacy. (Art. 4997, Law of Pharmacy.)

The candidate must be able to read prescriptions in script, translate them into English and French, write fully and legibly all the abbreviated words, point out the doses which are unusual, prepare, label and address properly the prescription, under the scrutiny of the examiner.

The candidate must recognize the Galenic preparations of the B. P., such as extracts, tinctures, powders, etc.; describe the composition of the compound preparations, giving the proportions of their active ingredients, the mode of preparation, and the doses. He must be able to describe properly in the presence of the examiner the different official Galenic preparations.

He must recognize samples of roots, barks, leaves, fruits, etc., employed in medicine, and name the official preparations into which they are incorporated; have a knowledge of the laws of physics and chemical combinations, of the nature and properties of the elements and their compounds, and recognize the acids, oxides, salts and other chemical bodies, described in the B. P., and also give their doses.

(2) FINAL EXAMINATION FOR LICENTIATE IN PHARMACY.

The Final Examination to be passed by the candidate includes all the subjects required for the Assistant in Pharmacy Examination, but a more thorough knowledge of these sciences is required, also practical, analytical Chemistry and Botany.

The candidate will have to describe the methods of obtaining acids, oxides, salts and other chemical compounds described in the B. P., explain the decompositions which take place when they are made, by means of written equations and diagrams, and also possess a good knowledge of the new synthetic products.

He must recognize the more important medicinal plants; know the therapeutics and posology of B. P. preparations, also the non-official plants which are used commonly, know the physiology and anatomy of

plants, the shape, structure and characteristics of the roots, barks, leaves, flowers, fruits, etc.; their physiological functions and their natural order.

He will be required to know the best antidotes for urgent cases of poisoning by the ordinary toxics, and must pass in a satisfactory manner the test on practical pharmacy, analytical chemistry, volumetric, and urine analysis.

He must also show that he is registered as an Assistant Pharmacist, and give proofs of having duly served four years under a doctor or druggist duly registered; that he has followed for two years the Medico-Pharmacal classes, two years of Physics and Chemistry classes, one year's course in Botany and other natural sciences, according to the programme established in institutions incorporated and authorized by the council of the Association; pass the examinations on the above subjects, and pay the fee. (Art. 4997, Law of Pharmacy.)

However, the student in Pharmacy or the certified clerk may, if he so desires, give up a whole twelve months exclusively to the study of Pharmacy. (Art. 4997.)

The Board of the Pharmaceutical Association will accept only one course in any subject in the same year; classes attended during the same scholastic year in different schools will count for one course. Private or academy classes will not be accepted.

At the Junior and Final Examinations, students must obtain 40 per cent. of points on each subject, at the written examination, and 50 per cent. on the total number of points, to be admitted to the oral examinations; but the student who passes satisfactorily the written examination is not obliged to begin it over again if he fails in the subsequent oral examination. At the oral examination, they must obtain at least 40 per cent. on each subject, and finally to obtain their license, they must obtain 60 per cent. of the total examinations, oral and written united. Any candidate receiving less than 40 per cent. on any one subject in the written or oral examinations, may apply at the following examination to be examined on this one subject. A candidate who fails to obtain the necessary 40 per cent. in two or more subjects must take all subjects of the examination over again. Any candidate who does not apply at the next examination following to take the subject in which he has failed, or who tries and fails again, will have to take the whole examination, either written or oral, as the case may be.

No certificate of examination will be accepted from any Pharmaceutical Association or College, unless it has been granted after a service of four years in a drug store and following a course of studies which in the opinion of the Board of the Association is equivalent to that required by the articles 4997-4998 of the Law of Pharmacy of the Province of Quebec.

Candidates who apply for the final examination, and who are not twenty-one years old, will be admitted to the examination, but if they

succeed their license will be retained until they have attained the age of twenty-one.

FEES FOR THE EXAMINATIONS.

The fees to be paid by candidates, besides the registration fee, before they are admitted to the examination, are as follows: Preliminary examination, $20.00, or $10.00 for each group. Assistant in Pharmacy, $15.00, and pharmacist, $25.00. These fees must be paid in advance to the Registrar of the Association.

Any person having registered his name for an examination and not attending will lose the fee paid.

In addition to the above, a sum of $40.00 is required for the Diploma of Assistant Pharmacist, and $75.00 for the diploma of Licentiate in Pharmacy.

FACULTY OF LAW.

GENERAL INFORMATION.

HISTORICAL STATEMENT.

The teaching of law at McGill began in 1848, when a few lectures in law were arranged for students in the Faculty of Arts. In 1853 the Faculty of Law was established with a staff of three members, the Hon. Wm. Badgley, Mr. J. J. C. Abbott and Mr. F. W. Torrance, Mr. Badgley holding the office of Dean. For more than half a century the Faculty devoted itself wholly to the training of students who intended to practise law in the Province of Quebec, and the teaching staff consisted entirely of judges and of counsel in active practice in Montreal.

The appointment of Dr. F. P. Walton as Dean of the Faculty in 1897 marked the beginning of a new development. Dr. Walton was the first *professeur de carrière*. He held the Gale chair of Roman Law, and the establishment of a full-time professorship did much to bring the Faculty into closer touch with the general life of the University.

In 1914, Dr. Walton resigned to take up an important legal position in Egypt, and was succeeded by Dr. Robert Warden Lee, Fellow of Worcester College, Oxford, who resigned in 1920, on his appointment to the new chair of Roman-Dutch Law, founded at Oxford by the Rhodes Trustees. Dr. Lee's chief contribution to the history of McGill lies in his initiation of the policy which aimed at developing the Law Faculty from a purely provincial into a national law-school, undertaking to provide the best possible legal education for students from all parts of Canada and elsewhere, while continuing to provide professional education of the highest standard for students intending to practise law in the Province of Quebec. During his tenure of the Deanship the new chair of "Jurisprudence and Common Law" was established in 1919, and this was followed in 1920 by the foundation of a third whole-time chair, with the title of "Constitutional Law." Similar provisions having recently been made for Quebec Law and Procedure, there are now four teachers devoting their whole time to the work of the Faculty.

In December, 1921, the Faculty was elected to membership in the Association of American Law-Schools. The Faculty has been also registered by the New York State Department of Education as complying with the requirements laid down by the New York Court of Appeals in the regulations governing admission to the Bar.

ADMISSION.

Students who have successfully completed one year in the Faculty of Arts at McGill University will be admitted to the Faculty of Law without further examination. Other candidates for admission will be

required either to pass the Senior Matriculation Examination of McGill University, or to satisfy the Matriculation Board that they are fully qualified for admission to the Second Year of the Arts course and have passed a satisfactory examination either in English or in French. In exceptional cases applicants over twenty-one years of age who have not attended a university may be admitted to the Faculty upon satisfying the Matriculation Board that they have obtained an educational standard equivalent to Senior Matriculation and are intellectually qualified to pursue with advantage the study of law.

Particulars of the Senior Matriculation Examination will be found in the General Announcement of the University.

Students whose right to enter the Second Year of the Arts course is conditional upon their passing supplemental examinations are not eligible for admission to the Faculty of Law.

Commencing with the session 1925-26, the standard of admission will be the completion of two years in Arts or its equivalent.

Students who, in addition to complying with the above requirements, have successfully completed at least one year's resident study of law in a recognized law-school may be admitted to Second Year standing upon satisfying the Faculty that their standard of attainment is sufficient to justify the granting of this privilege. If necessary, an examination will be held to determine the degree of the applicant's proficiency, and for any such examination a special fee of $5 per paper will be required.

In exceptional cases students who have successfully completed two or more years' resident study at a recognized law-school may be admitted to Third Year standing by special vote of the Faculty.

The attention of students desiring to practise law in the Province of Quebec is called to the fact that the regulations of the Quebec Bar require the whole course of legal study to be pursued at a university within the Province. Such students, therefore, cannot be granted credit for studies pursued at other universities outside the Province.

Women are admitted to the Faculty on the same terms as men, and are eligible for all degrees. As the law stands at present, however, they cannot be admitted to the Bar or to the notarial profession in the Province of Quebec.

PARTIAL STUDENTS.

The Faculty may admit a limited number of suitable persons to attend selected courses of lectures without matriculating in the University. Such permission will only be granted to applicants of at least twenty-one years of age who satisfy the Faculty of their capacity to undertake with advantage the study of law. They will not be allowed to proceed to degrees, but will be entitled to receive a certificate specifying the course of study which they have successfully pursued and the class which they have obtained in the examination.

DEGREES.

The degrees granted in the Faculty are Bachelor of Civil Law (B.C.L.) and Bachelor of Laws (LL.B.).

The degree of B.C.L. is granted to those students who successfully follow the course of study in Civil Law, and the degree of LL.B. to those students who successfully follow the Common Law course. The amount of work required and the standard of proficiency exacted will be the same for students in either course. Each course covers three years.

No student under the age of 21 years will be eligible for a degree.

The degrees of LL.M. and D.C.L. are granted under the authority of the Faculty of Graduate Studies and Research. The regulations governing these degrees are given in the Announcement of that Faculty.

The Faculty strongly recommends to all students who desire to attain distinction in their profession or who wish to take up the teaching of law the advantage of devoting an extra year to special study and preparing a thesis for the degree of LL.M. In the case of students who intend to practise in Montreal a course of special study is compatible with attendance in an office during the greater part of the day.

MOOT COURTS.

Under the supervision of the professors moot courts are held from time to time during the session in order to afford students practice in the preparation and presentation of legal arguments. Regular attendance at these courts will receive credit as class-room work.

LIBRARY.

The Law Library of the University at present contains over 7,500 volumes, and immediately adjoins the lecture rooms. The principal reports of Canada, the United Kingdom, and France are taken, as well as a selection of reports from the United States and elsewhere. The annual appropriation for the maintenance of the Law Library has now been largely increased.

There is a small lending library, from which students can obtain text-books for the session on payment of an *ad valorem* fee.

Students in the Faculty are permitted to use the Library of the Court House, which contains in addition a large number of the principal American reports, both of the Federal and of the State courts. The general Library of the University is also available for the use of law students.

COURSE OF STUDY IN LAW.

The Faculty of Law aims at giving a sound practical and scholarly education in the principles of:—

THE CIVIL LAW OF QUEBEC.

THE COMMON LAW AND STATUTE LAW OF CANADA.

CONSTITUTIONAL AND MUNICIPAL LAW.

PUBLIC AND PRIVATE INTERNATIONAL LAW.

INSTITUTES OF ROMAN LAW.

THEORETICAL AND COMPARATIVE JURISPRUDENCE.

The courses selected by students will largely depend upon whether they wish to practise law in the Province of Quebec or in some common law jurisdiction. Those who wish to practise in Quebec must be careful to select lectures which will comply with the statutory requirements of the Quebec Bar, a summary of which will be found on page 22. Particulars of the Bar requirements in other provinces can be obtained from the secretaries of the various provincial Bar societies.

Students intending to practise at the Quebec Bar or as notaries in the Province of Quebec will take the civil law course leading to the degree of B.C.L. Other students will take the common law course for the degree of LL.B.

The teaching of several subjects will be mainly conducted according to the case or source method; that is to say, the principal feature of the instruction will be the free discussion by teacher and students of decided cases and other authorities.

The following classification of the lectures will give an outline view of the teaching provided for civil law and common law students respectively. It is liable to modification from time to time, and students will be at liberty, subject to permission from the Dean, to select lectures from other courses in addition to their own, should they wish to do so.

FIRST YEAR.

Civil Law (B.C.L.)	Common Law (LL.B.)
ROMAN LAW.	**ROMAN LAW.**
JURISPRUDENCE AND COMPARATIVE LAW.	**JURISPRUDENCE AND COMPARATIVE LAW.**
IMMOVABLE PROPERTY.	**REAL PROPERTY.**
OBLIGATIONS.	**CONTRACTS.**
LAW OF PERSONS.	**TORTS.**
CRIMINAL LAW AND PROCEDURE.	**CRIMINAL LAW AND PROCEDURE.**
CIVIL PROCEDURE (Quebec).	**LEGAL HISTORY** (British and Canadian).
LEGAL HISTORY (Quebec).	**LAW OF PERSONS.**
INTRODUCTION TO COMMERCIAL LAW.	**INTRODUCTION TO COMMERCIAL LAW.**

SECOND AND THIRD YEARS.

Civil Law	Common Law
IMMOVABLE PROPERTY.	REAL PROPERTY, LAND TITLES, etc.
EVIDENCE.	EVIDENCE.
NEGOTIABLE INSTRUMENTS AND BANKING.	NEGOTIABLE INSTRUMENTS AND BANKING.
COMMERCIAL SALES.	COMMERCIAL SALES.
*INSURANCE.	*INSURANCE.
*CORPORATIONS.	*CORPORATIONS.
BANKRUPTCY AND INSOLVENCY.	BANKRUPTCY and INSOLVENCY.
*PUBLIC INTERNATIONAL LAW.	*PUBLIC INTERNATIONAL LAW.
PRIVATE INTERNATIONAL LAW.	PRIVATE INTERNATIONAL LAW.
AGENCY.	AGENCY.
PARTNERSHIP.	PARTNERSHIP.
*SHIPPING and CARRIERS.	*SHIPPING and CARRIERS.
*CONSTITUTIONAL LAW.	*CONSTITUTIONAL LAW.
*MUNICIPAL CORPORATIONS.	*MUNICIPAL CORPORATIONS.
WILLS, SUBSTITUTIONS, etc.	*WILLS and ADMINISTRATION.
CIVIL PROCEDURE (Quebec).	PROCEDURE and PLEADING.
MARRIAGE COVENANTS, etc.	DOMESTIC RELATIONS.
LEASE, HIRE, and PRESCRIPTION.	*TRUSTS.
*SUCCESSIONS and GIFTS.	EQUITABLE REMEDIES.
PUBLIC UTILITIES.	LEGAL DRAFTSMANSHIP.
ROMAN LAW (special topics).	PUBLIC UTILITIES.
NOTARIAL LAW (for notarial students only).	

Each student will follow the course of study prescribed for him by the regulations of the Faculty. The progress of a student is reckoned by points. Each point represents the successful completion of a course of study involving attendance at lectures for one hour a week during one half-session. For example, a course of study involving attendance at lectures for two hours a week throughout the whole session would have a credit value of four points.

A student may attend lectures not exceeding four points in value in any one session in addition to those prescribed for his course. No student can receive credit for such additional courses unless his attendance upon them has been approved by the Dean.

Subject to the approval of the Faculty in each case, a student may obtain credit for not more than seven points for a course of legal study successfully completed by him in the summer session of a law-school of sufficiently good standing in Canada or in the United States.

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*Lectures on these subjects will not be given in the session 1923–24.

The Faculty desires to impress upon all students who intend to practise law in the Province of Quebec the necessity of obtaining a familiar knowledge of French. In this Province it is essential that a practising lawyer should be able to write and speak French with fluency, and it is highly desirable that every educated lawyer in any part of Canada should have at least a reading knowledge of the French language.

No student will be deemed to have passed his year unless he has obtained twenty-four points upon the studies of that year, and has an average mark of 60% upon the papers necessary to make up that number.

EXAMINATIONS.

There will be written examinations at the end of each session upon the work done during that session as well as term examinations. At the final examinations questions may be set upon any subject studied by the student during the three-year course. The written examinations may be supplemented by oral examinations in cases where the Faculty considers such action desirable.

At the close of each term or session all students must present themselves for examination in every subject for which they are registered. No student will be permitted to present himself for examination who has not regularly attended the lectures upon the subject, unless he has been prevented by some necessary cause and his absence has been excused by the Dean.

The pass mark is 50% for each paper and an average of 60% for the whole examination. Successful students will be graded in three classes, and the names of those in each class will be published in order of merit, but the marks awarded upon the various papers will not be published.

Subject to the approval of the Faculty in each case, a student who has been prevented by illness from taking certain papers in the sessional examination may be permitted to take supplemental papers on the same subjects in September. A fee of $5.00 will be payable in respect of each paper. No other supplemental examinations will be granted, but students who have obtained the requisite number of points may be permitted to present themselves again at the close of the next term for examination in the subjects in which they have previously failed.

At all examinations in the Faculty students are at liberty to write their answers either in English or in French.

PROGRAMME OF STUDIES.

Lectures marked * are intended specially for Civil Law students, and those marked † specially for Common Law students.

Pending the preparation of a series of case-books suitable for Canadian use the lecturers will indicate to the students the cases and other authorities required for study in each course.

FIRST YEAR LECTURES.

ROMAN LAW.

Three hours throughout the session. Mr. Rose.

CRIMINAL LAW.

Two hours in the first term. Mr. Rose

CRIMINAL PROCEDURE.

One hour in the first term and two hours in the second term. Mr. Calder.

OBLIGATIONS.

Two hours throughout the session. Hon. Mr. Justice Howard.

JURISPRUDENCE AND COMPARATIVE LAW.

Two hours in the first term. Professor Smith.

† CONTRACTS (COMMON LAW).

Two hours throughout the session. Professor Smith.

† TORTS (COMMON LAW).

One hour in the first term and two hours in the second term.
Professor Smith.

† REAL PROPERTY (COMMON LAW), PART 1.

Two hours throughout the session. Professor Mackay.

* CIVIL PROCEDURE (QUEBEC).

Two hours throughout the session. Hon. Mr. Justice Surveyer.

* IMMOVABLE PROPERTY (QUEBEC), PART I.

Three hours in the second term. Mr. Rose.

PERSONS (CIVIL CODE).

Two hours in the second term. Mr. LeMesurier.

† LEGAL HISTORY (BRITISH AND CANADIAN).

One hour in the first term. Professor Mackay.

* LEGAL HISTORY (QUEBEC).

Two hours in the first term. Mr. Rose.

INTRODUCTION TO COMMERCIAL LAW.

One hour in the second term. Mr. LeMesurier.

SECOND AND THIRD YEAR LECTURES.

The lectures to senior students are divided into two groups, given in alternate years.

Subjects treated in the Session 1923-24.

* MARRIAGE CONVENANTS AND MINOR CONTRACTS (CIVIL CODE).

Two hours throughout the session. Assistant Professor Chipman.

PRIVATE INTERNATIONAL LAW.

Two hours in the first term. Professor Macdougall.

† LEGAL DRAFTSMANSHIP.

Two hours throughout the session. Professor Mackay.

EVIDENCE (CIVIL CODE AND COMMON LAW).

Two hours in the second term. Professor Wainwright.

NEGOTIABLE INSTRUMENTS AND BANKING.

Three hours in the second term. Mr. LeMesurier.

* IMMOVABLE PROPERTY (CIVIL CODE).

Two hours in the first term. Mr. LeMesurier.

* CIVIL PROCEDURE (QUEBEC).

Two hours in the first term. Hon. Mr. Justice Surveyer.

† PROCEDURE AND PLEADING (COMMON LAW).

Two hours throughout the session. Professor Mackay.

† EQUITABLE REMEDIES.

Two hours in the first term. Professor Smith.

SALE OF MOVABLES.

Two hours in the first term. Mr. LeMesurier.

BANKRUPTCY AND INSOLVENCY.

Two hours in the second term. Hon. Chief Justice Martin.

* WILLS, SUBSTITUTIONS, AND TRUSTS (CIVIL CODE).

Two hours in the second term. Mr. Beullac.

† DOMESTIC RELATIONS (COMMON LAW).

Two hours in the second term. Professor Smith.

* ROMAN LAW (SPECIAL TOPICS).

One hour in the second term (for Third Year students only). Mr. Rose.

PUBLIC UTILITIES.

One hour in the second term. Hon. Mr. Justice Rinfret.

CRIMINAL LAW (SPECIAL TOPICS).

One hour in the first term. Mr. Calder.

AGENCY.

Two hours in the first term (for Second Year students only)
Mr. LeMesurier.

PARTNERSHIP.

One hour in the first term (for Second Year students only).
Mr. LeMesurier.

NOTARIAL LAW (FOR NOTARIAL STUDENTS ONLY).

Two hours in the first term. Mr. Bridgman.

Mr. LeMesurier will conduct a special tutorial class in practice work for Civil Law students of the Third Year. Two hours a week in the second term.

Other Subjects Given in the Second and Third Years.

The list given below corresponds to that arranged for the session 1922-23. Students will understand that it is liable to modification.

* LEASE, HIRE, AND PRESCRIPTION (CIVIL CODE).

Assistant Professor Chipman.

PUBLIC INTERNATIONAL LAW.

Professor Mackay.

* CIVIL PROCEDURE (QUEBEC).

Professor Surveyer.

CONSTITUTIONAL LAW.

Professor Mackay.

INSURANCE.

Assistant Professor Tyndale.

† TRUSTS (COMMON LAW).

Professor Smith.

CORPORATIONS.

Hon. Chief Justice Martin.

AGENCY.

Mr. LeMesurier.

PARTNERSHIP.

Mr. LeMesurier.

NOTARIAL LAW (FOR NOTARIAL STUDENTS ONLY).

Mr. Bridgman.

* SUCCESSIONS AND GIFTS (CIVIL CODE).

Mr. Beullac.

† WILLS (COMMON LAW).

Professor Smith.

† REAL PROPERTY, PART II (COMMON LAW).

Professor Mackay.

* IMMOVABLE PROPERTY (CIVIL CODE).

Mr. Rose.

CARRIERS, MERCHANT SHIPPING, AND ADMIRALTY LAW.

Mr. LeMesurier.

* MUNICIPAL CODE OF QUEBEC.

Hon. Mr. Justice Rinfret.

* ROMAN LAW (SPECIAL TOPICS).

Mr. Rose.

SPECIAL LECTURES.

The Hon. Mr. Justice Mignault will deliver two lectures on "Legal Ethics" in the course of each session.

ADMISSION TO THE PRACTICE OF LAW IN QUEBEC.

The attention of students who wish to be admitted to the Bar or to the notarial profession in Quebec is drawn to the following summary of the statutory provisions governing the practice of law in the Province:—

I. REGULATIONS APPLICABLE TO THOSE WHO INTEND TO BECOME MEMBERS OF THE BAR.

N.B.—The articles are here abridged.

Article 4522 R.S.Q.—Examinations for admission to study and to practise law in the Province of Quebec are held at the time and place determined by the General Council.

The examinations are held alternately in Montreal and Quebec every six months; namely, at Montreal, on the second Tuesday of each January, and at Quebec, on the first Tuesday of each July.

All information concerning these examinations can be obtained from the Secretary-Treasurer of the General Council. The present General Secretary is Mr. Victor Martineau, K.C., 17 St. James Street, Montreal.

Article 4524.—Candidates must give notice, as prescribed by this article, at least one month before the time fixed for the examination to the Secretary of the section in which he has his domicile or in which he has resided for the past six months.

Article 4475.—This article provides that candidates holding the degree of Bachelor of Arts, Bachelor of Science, or Bachelor of Letters, from any Canadian or British University are dispensed from the examination for admission to study. Such candidates are required to give the notice mentioned above.

Article 4526 R.S.Q. (as altered by by-law of the General Council).—On giving the notice prescribed by Article 4524, the candidate pays the Secretary a fee of $2.00, and makes a deposit of $125.00 for a complete certificate of admission to study; of $70.00 for a partial certificate of admission to study; and of $200.00 for admission to practice, which deposit, less $30.00, is returned in case of his not being admitted.

Article 4531.—To be admitted to practice, the student must be a British subject and must have studied regularly and without interruption during ordinary office hours, under indentures entered into before a notary, as clerk or student with a practising advocate during four years, *dating from the registration of the certificate of admission to study.* This term is reduced to three years in the case of a student who has followed a regular law course in a university or college in this Province and taken a degree in law therein.

The By-laws passed by the General Council of the Bar of the Province of Quebec provide as follows:—

Article 51.—A course of lectures on law given and followed at a university or law school of this Province, and the diploma or law degree

conferred on students by such university or law school, shall count with reference to the Bar Act, only if the course of study hereinafter outlined has been effectively followed by the university or law school and by the holder of the diploma. (R.S.Q., ss. 1483, §4531.)

Article 52.—A regular law course in a university or law school of this Province consists of seven hundred and eighty-five lectures of one hour each. These lectures are given on the various subjects in the following proportions:—

ROMAN LAW:—103 lectures:—This course comprises an introduction to the study of law, with explanatory remarks and comments on the Institutes of Justinian and on the principal Roman jurisconsults.

CIVIL, COMMERCIAL AND MARITIME LAW:—413 lectures:—The course on these subjects must cover a period of at least three years. It comprises the history of French and Canadian law, explanatory remarks and comments on the Civil Code and on the statutes respecting commerce and shipping.

CIVIL PROCEDURE:—103 lectures:—This course must extend over at least two years. It comprises explanatory remarks and comments on the Code of Civil Procedure and of its statutory amendments, a study of the organization of the Civil court of this Province and the history of the different judical systems of the country; also the special modes of procedure provided by the statutes and by the by-laws in general, as well as the Bar Act and the By-laws regarding the discipline of the Bar.

PUBLIC AND PRIVATE INTERNATIONAL LAW:—21 lectures:—This course comprises an historical outline, the sources of this law and of its subject matter, its objects (primary and secondary rights of sovereign states), rules of war, commercial and extradition treaties, etc., in force in Canada, as well as the rights and obligations of the citizens of the Province of Quebec and of Canada, and of aliens in the event of conflict of laws.

CRIMINAL LAW:—69 lectures:—This course comprises the history of Canadian criminal law, the organization of the criminal courts, criminal procedure, comments on the criminal law of the country, a comparative study of English and Canadian criminal law. The lectures shall extend over two years.

CONSTITUTIONAL AND ADMINISTRATIVE LAW:—41 lectures:—This course comprises an enquiry into the different constitutional enactments and public institutions of the country, the powers, the organization, the procedure of the Federal Parliament and of the Provincial Legislatures, the laws on Education, and the Municipal Code.

COMPARATIVE LAW:—30 lectures:—This course comprises a concise enquiry into the English common law, and a general knowledge of the main principles underlying the civil and commercial laws of the other Provinces of Canada.

Article 53:—The candidate for admission to practice who has obtained a law degree from a university or law school of this Province, must file, together with this notice, a certificate from the principal or head of such university or law school establishing that he has followed a law course in such university or law school during at least three years in conformity with the Bar Act, and moreover specifying the number of lectures he has actually attended in each subject comprised in the foregoing curriculum during each of the three years and during the three years as a whole.

Article 54:—The examiners must refuse to accept such degree as valid under the provisions of the Bar Act, if they are of the opinion that the course of study hereinabove outlined has not been effectually followed by the candidate.

II. REGULATIONS APPLICABLE TO THOSE WHO INTEND TO BECOME NOTARIES.

For the regulations applicable to candidates for the notarial profession, see Revised Statutes of Quebec, Articles 4774–4807.

FACULTY OF DENTISTRY.

FOUNDATION AND HISTORY.

The Dental Department of McGill University was established as a Department of the Faculty of Medicine, in the autumn of 1903. This fact insured for the student the very best training in anatomy, physiology, histology, embryology, bacteriology, chemistry, etc., those fundamental subjects, a knowledge of which underlies a successful practice along modern lines of preventive dentistry.

At that time the didactic teaching and laboratory work were carried on in the lecture rooms and laboratories of the Medical Building, clinical instruction being given at the Dental Infirmary, a clinic conducted by the Dental Association of the Province of Quebec. This arrangement fulfilled the requirements of the Department for a time, but soon the need of separate quarters for didactic and laboratory instruction and also of improved clinical facilities was felt. These have been supplied, first by the appropriation of a portion of the east wing of the Medical building, and, second, by the establishment of a clinic at the Montreal General Hospital.

The new quarters of the Faculty occupy the northern half of the first floor of the east wing of the Medical Building. Here are provided all the necessary lecture rooms and laboratories, as well as private rooms for the members of the staff. The laboratories are equipped with the latest apparatus and appliances for teaching practical dental operations.

The clinic at the Montreal General Hospital was established in connection with the out-patient department of the Hospital in the early part of the session 1908-09.

The rapid growth of the Faculty, however, soon made necessary the enlargement of our facilities for teaching Clinical Dentistry, and so in 1921 the University, acting conjointly with the Governors of the Montreal General Hospital, thoroughly remodelled the space used for the clinic, and in addition erected a new wing 80 ft. x 36 ft.—the entire wing being occupied by dental chairs and equipment. This gives to the Faculty one of the most thoroughly equipped dental clinics on the Continent. In addition to the splendid equipment and facilities provided in the Hospital clinic, students of the Dental Faculty share with the other departments the advantages of the great Hospital with which it is connected, such as a splendid "X" ray department and a well-managed pathological department. They also have the privileges of the surgical operating amphitheatre, and the Hospital anaesthetists are always available for operations in connection with the oral cavity.

Notwithstanding our greatly increased facilities for dealing with a large number of patients the number attending the dental clinic is still adequate, and more than adequate, to supply our students with every possible description of dental treatment. The Staff of Clinical Instructors is being very materially enlarged, so that our students in the clinic are assured of intelligent supervision and co-operation. The equipment is modern in every respect.

The Medical and Dental Library of McGill is one of the finest in America, so that students who desire may have the benefit of a great reference library.

The Dean devotes his entire time to the work of the Faculty, thus insuring for the students careful and continuous oversight in both theoretical and practical work.

If any who are interested in the study of dentistry will write to Dr. A. W. Thornton, Dean of the Faculty, he will be glad to furnish all possible information.

ENTRANCE REQUIREMENTS.

Intending students are reminded that a University degree in Dentistry does not always give a right to practise the profession of Dentistry. It is necessary to comply with the Dental laws of the country or province in which it is proposed to begin practice. Each province in Canada at present has special requirements for its license, and in most provinces a certain standard of general education is insisted upon before beginning the study of Dentistry. *Students who intend practising in Canada are advised to register their qualifications in the Province in which they intend to practise at the beginning of their course in Dentistry.*

Students may qualify for entrance to Dentistry by passing the Matriculation Examination of the University (particulars of which are given in the General Announcement), or by presenting a certificate of registration with a Provincial Dental Council, but those who wish to practise in the Province of Quebec, if they do not hold a degree in Arts from a British or Canadian university, must pass the Matriculation Examination of the College of Dental Surgeons of that Province.

The following is a list of the Registrars of the several Canadian Provinces. Students are advised to write for information whenever they are in doubt as to the regulation of any province.

†*Ontario.*—W. E. Willmott, Toronto.
†*Nova Scotia.*—Geo. K. Thompson, D.D.S., Halifax.
†*New Brunswick.*—F. A. Godsoe, D.D.S., St. John.
†*Prince Edward Island.*—J. S. Bagnall, D.D.S., Charlottetown.
†*Manitoba.*—H. F. Christie, D.D.S., 626 Somerset Block, Winnipeg.
†*Alberta.*—H. F. Whittaker, D.D.S., Edmonton.
†*Saskatchewan.*—L. J. D. Faskin, Regina.
Quebec.—Dr. Denis Forest, 187 de la Roche St., Montreal.
†*British Columbia.*—Albert Brighouse, Vancouver.

DOMINION DENTAL COUNCIL OF CANADA.

Eight of the nine Canadian Provinces (*i.e.*, all but Quebec,) have entered into an agreement whereby the holder of a license granted by the Dominion Dental Council may practise in any of the subscribing provinces. In order to obtain this license a candidate must: (1) Hold a matriculation certificate of the proper standard; (2) Pass the examination set by the council, and (3) Pay the local provincial registration fee.

For matriculation, the Council accepts the Junior matriculation of the Province of Ontario or matriculation into the Faculty of Arts of any Canadian university.

The Secretary of the Dominion Dental Council is Major W. D. Cowan, M.P., Regina, Sask.

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†Members of the Dominion Dental Council.

REQUIREMENTS FOR THE PRELIMINARY EXAMINATION OF THE COLLEGE OF DENTAL SURGEONS OF THE PROVINCE OF QUEBEC.

To be legally admitted to the study of Dental Surgery in the Province of Quebec, the candidate must:

1. From June, 1921, to June, 1927, (a) present a certificate stating that he has successfully passed the special matriculation examination required by the Board of Governors, and that he is nineteen years of age; or else show that he is a bachelor of arts, letters or sciences (B.A., B.L., B.S.); or (b) hold a matriculation certificate from a recognized university of the Province of Quebec stating that he is regularly admitted to study Dental Surgery therein, because (a) (for the sessions 1921-22 and 1922-23) he has completed five years of classical studies (Belles-lettres) for French university college, or four years high school, plus one year college for an English university; (for the sessions 1923-24 and 1924-25) six years of classical studies (Rhetorique) in French university college or four years high school, plus two years college in an English university; (for the sessions 1925-26 and 1926-27) seven years of classical studies (Philosophy Jr.) or four years high school, plus three years college; (for the session 1927-28), eight years of classical studies (Philosophy Sr.) or four years high school, plus four years college; and (b) that he has successfully passed all examinations required at the end of each of the above-mentioned periods of study; or that he has made equivalent studies and successfully passed equivalent examinations before the Matriculation Board of the university.

2. After June, 1927, the candidate must: (a) present a certificate stating that he has successfully passed the special matriculation examination prescribed by the Board, and is 19 years of age, or must hold a University diploma of B.A., B.S., or B.L., or (b) hold a certificate from a university of the Province of Quebec stating that he has been regularly admitted to study therein, because (a) he has completed eight years of classical studies or four years high school, plus four years college; (b) has successfully passed all required examinations, or (c) has made equivalent studies and has successfully passed examination thereon before the Matriculation Board of the University.

3. In and after 1929 he must hold a bachelor's diploma from a university recognized in good standing by the Board of Governors.

The details of the Dental Board examination are as follows:—

Group A.—Classics.

Latin.—Cæsar's Commentaries, Books I, II, III; Virgil's Eneid, Books I, II.; questions on grammar and constructions.

English.—Grammar and Analysis; knowledge of one of Shakespeare's plays ("Othello," 1922-1923).

French.—Questions on Grammar and Analysis; translation into English of extracts from Fénelon's "Aventures de Télémaque," Books 1 to 10 inclusive; translation of short English sentences into French.

Literature.—Principles of the subject, with the History of Greek and Roman literature of the classical age, and of English literature from the beginning of the 17th century to the present time.

History.—Outlines of Greek and Roman History with a rather more detailed knowledge of the History of England, France and Canada.

Geography.—Modern, especially of Britain and France, and of their colonies and possessions, especially of Canada.

GROUP B.—SCIENCES.

Arithmetic.—To the end of Square Root, and a practical knowledge of the Metrical System.

Algebra.—To simultaneous equations of the first degree, inclusive.

Geometry.—Euclid, Books I, II, III, and the first twenty propositions of Book VI, also the measurement of the surfaces and volumes of the geometrical figures.

Botany.—As in Gray's "How Plants Grow."

Chemistry.—As in Remsen's "Elements of Chemistry."

Philosophy.—Logic, as in Jevons' Logic to page 182. Intellectual and Moral Philosophy, as in Christian Brothers' Philosophy, by L. Poissy.

Physics.—Elementary Statics and Dynamics of Solids and Fluids, with the Chapter on Heat, according to Peck's.

Candidates may take one group at one examination and the other group at the next subsequent examination. If a candidate fails in only one subject, he will have to take over that subject only. In order to pass, the candidate must obtain 60 per cent. in Latin, English, French and Arithmetic, and 50 per cent. in the other subjects. Candidates must produce certificates of good moral character.

The examinations are held at Montreal, on the first Wednesday in April and the second Wednesday in September. Applications are to be made in person to the Secretary, accompanied with the receipt of the Treasurer for the matriculation fee, at least fifteen days before the date of examination. **Fee, $20.00.**

For other information, apply to Dr. Denis Forest, Secretary, College of Dental Surgeons of the Province of Quebec, 187 de la Roche St.

COURSE FOR THE DEGREE OF D.D.S.*

FIRST YEAR

Anatomy.
Biology (General).
Chemistry (General and practical).
Dental Anatomy.
Prosthetic Dentistry.
Physics.

SECOND YEAR

Anatomy.
Crown and Bridge Work.
Dental Anatomy.
Dental Histology.
Dental Metallurgy.
Histology and Embryology.
Operative Technic.
Pharmacology.
Physiology.
Prosthetic Technic.

THIRD YEAR

Bacteriology.
Crown and Bridge Work.
Dental History and Economics.
Dental Jurisprudence.
Dental Materia Medica.
Dental Pathology.
Dental Surgery.
Dental Therapeutics.
Operative Dentistry.
Orthodontia.
Pathology (general).
Prosthetic Dentistry.

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*It should be understood that the programme and regulations regarding courses of study and examinations contained in this calendar hold good for this calendar year only, and that the Faculty of Dentistry, while fully sensible of its obligations towards the students, does not hold itself bound to adhere absolutely, for the whole four years of a student's course, to the conditions here laid down.

FOURTH YEAR

Anaesthetics.
Crown and Bridge Work.
Dental Hygiene.
Dental Pathology.
Dental Surgery.
Materia Medica.
Operative Dentistry.
Orthodontia.
Practical Crown and Bridge Work.
Practical Prosthesis.
Prosthetic Dentistry.

EXAMINATIONS.

Frequent oral examinations are held to test the progress of the student and occasional written examinations are given throughout the session.

A minimum of 50 per cent. in each subject is required to pass, and 75 per cent. for honours.

All examinations in each year must be passed before a student will be allowed to advance to the next.

Candidates who fail at the regular examinations in not more than three subjects of the First, Second or Third Years may, at the discretion of the Faculty, be allowed to take the supplementary examinations before the beginning of the following session. These examinations will be held during the week preceding the regular opening of the session.

Failure in more than three subjects of the First, Second or Third years at the regular examinations excludes the candidate from advancement.

Students who fail in one subject only of the Final Year may, at the discretion of the Faculty, be allowed a supplementary examination in that subject. Should the subject be one in which practical or clinical work is required, the student must furnish a certificate of additional clinical attendance or laboratory work before presenting himself for examination.

Students who fail at the examination held at Christmas may, at the discretion of the Faculty, be allowed a supplementary examination in that subject at a period not less than three months after the regular examination. Should the subject be one in which practical or clinical work is required, the student must furnish a certificate of additional clinical attendance or laboratory work before presenting himself for examination.

Applications for supplemental examinations must be in the hands of the Dean at least three days before the date set for the beginning of the examination, and they must be accompanied by a fee of $5.00 for each subject.

MEDALS AND PRIZES.

The F. A. Stevenson Gold Medal.—Awarded to the student in the final year who stands first in the science and practice of Dentistry. The standing will be determined not only by the written and practical examinations at the end of the year, but by the general work of the student during the whole course.

Final Year Prize.—A prize in books will be awarded to the final year student who stands second in the class. The standing will be determined in a manner similar to that followed in the awarding of the gold medal.

Third Year Prizes.—Two prizes (first and second), in books, will be awarded to the Third Year students in the science and practice of Dentistry. The method of determining the winners of these prizes will be similar to that adopted in awarding the prizes in the final year.

Second and First Year Prizes.—A prize in books is awarded to the student obtaining the highest stand at the Final Examinations.

TEXT-BOOKS.

ANATOMY.—Gray or Cunningham, Morris, Quain, Piersol.
PRACTICAL ANATOMY.—Parsons and Wright, Vol. II.; Cunningham, Vol. III
PHYSICS.—A. W. Duff.
LABORATORY MANUAL.—First Year Course in Physics (Renouf Pub. Co.)
GENERAL CHEMISTRY.—Smith's Intermediate Chemistry.
PHYSIOLOGY.—Haliburton, Howell, Starling, Stewart, Burton, Opitz, Physiology for Dental Students, Pearce McLeod.
PHARMACOLOGY.—Dixon, Cushny.
BACTERIOLOGY.—Muir and Ritchie, McFarland, Park, Connell.
DENTAL ANATOMY.—Black.
PROSTHETIC DENTISTRY.—Wilson.
HISTOLOGY.—Jordan, Noyes, Schafer's "Elements," Bailey.
MATERIA MEDICA AND THERAPEUTICS.—Hare, Gorgas, Buckley, Prinz.
ORAL SURGERY.—Marshall, Blair's Surgery and Diseases of the Mouth and Jaws, Brophy's Oral Surgery.
ORTHODONTIA.—Angle, Pullen, Lischer, Dewey.
CROWN AND BRIDGE WORK.—Goslee, Peeso.
DISEASES AND INJURIES OF THE TEETH.—Smale and Colyer, Pickerill's Prevention of Dental Caries.
PRINCIPLES OF SURGERY.—Senn.
OPERATIVE DENTISTRY.—Johnson, Black.
MICRO-ORGANISMS OF THE HUMAN MOUTH.—Miller.
DENTAL PATHOLOGY AND PHARMACOLOGY.—Burchard and Black.
REGIONAL ANATOMY OF THE HEAD AND NECK.—Eckley.

QUALIFICATIONS FOR THE DEGREE.

1. No one will be admitted to the degree of Doctor of Dental Surgery who shall not have attended lectures for a period of four sessions in this University, or partly in this University and partly in some other approved university, college or school of dentistry.

2. Students of other universities, so approved, who may be admitted on production of certificates to a like standing in this University shall be required to pass an oral examination in primary subjects and all examinations in the final subjects in the same manner as students of this University.

3. Candidates for the final examination shall furnish testimonials of attendance on the following branches of dental education; provided, however, that testimonials equivalent to, though not precisely the same as, those stated above, may be presented and accepted.

Biology, General Chemistry, Practical Chemistry, Physics, Histology, Embryology, Anatomy, Practical Anatomy, Physiology, Practical Physiology, Bacteriology, Dental Materia Medica and Therapeutics, Pharmacology, Dental Pathology, General Pathology, Dental Anatomy, Dental Histology, Metallurgy, Dental Surgery, Dental Hygiene, Dental Jurisprudence, Operative Dentistry, Prosthetic Dentistry, Crown and Bridge Work, Orthodontia, Anaesthetics, Dental History and Economics.

No one will be permitted to become a candidate for the degree who has not attended at least one full session at this University.

4. Every candidate for the degree must, on or before the 1st day of May, present to the Dean of the Faculty testimonials of his qualifications, entitling him to an examination, and must at the same time deliver to the Dean of the Faculty an affirmation or affidavit that he has attained the age of twenty-one years.

COURSES OF LECTURES.

BIOLOGY.

The course in Biology for Dental students is conducted, conjointly, by the University Departments of Botany and Zoology. It consists of three parts:—

Part I.

PROFESSOR OF BOTANY:—FRANCIS E. LLOYD.
ASSISTANT PROFESSOR:—GEORGE W. SCARTH.

This part of the course deals with the rationale and simple technique of microscopic vision, including both light and dark field illumination (ultramicroscope). Twelve lectures and twelve laboratory periods, three of each per week, during the first month of the session.

Part II.

PROFESSOR OF ZOOLOGY:—ARTHUR WILLEY.
ASSISTANT PROFESSOR:—J. STAFFORD.
LECTURER:—M. NOTKIN.

The course in elementary Zoology is that part of the pre-medical curriculum which introduces the student to some of the terms and principles of animal biology. The manner in which the leading functions of the body are performed in a number of selected types is explained, thereby preparing the student for the reception of the more advanced instruction in human anatomy and physiology.

Part III.

PROFESSOR OF BOTANY:—FRANCIS E. LLOYD.
ASSISTANT PROFESSOR:—GEORGE W. SCARTH.

This part of the course is a continuation of Part 1 and runs concurrently with the course in Histology and Embryology. It is designed to present to the student the principles of general biology as illustrated by plants.

CHEMISTRY.

PROFESSOR OF CHEMISTRY:—R. F. RUTTAN.
ASSOCIATE PROFESSOR:—N. N. EVANS.
ASSISTANT PROFESSOR:—W. H. HATCHER.

Instruction in chemistry for students in Dentistry is given during the first year and is identical with the course given to First Year students in Medicine.

During the session the principles governing chemical action are studied in a systematic laboratory course of two periods per week. A printed synopsis of the work of each day is provided and necessary explanations given before beginning the work. The course includes a study of chemical phenomena; the preparation and properties of typical elements and compounds; the laws of chemical action; gravimetric and volumetric determinations, and a short course in qualitative and quantitative analysis. The student is required to pay special attention to the keeping of an accurate record of his observations and calculations; note-books for this purpose are provided and are examined and critized by the demonstrators. An examination is held at the end of the session.

During the session, a course of experimental lectures in general chemistry is given; three per week, with frequent reviews and examinations. This course is designed to familiarize the student with the characteristics of chemical action and the conditions which modify it rather than a detailed study of the preparation and properties of the elements and their compounds. An examination is held at the end of the term.

PHYSICS.

DIRECTOR OF PHYSICS:—A. S. EVE.

ASSISTANT PROFESSOR:—H. E. REILLEY.

DEMONSTRATORS:—VIOLET HENRY. L. A. SMITH. R. J. CLARK.

First Year.—This course is given in the Physics Building of the University. It consists of three lectures and a laboratory period of three hours per week.

The lectures are experimental in character, especially designed to meet the requirements of students in Medicine and Dentistry. The course includes a study of energy, simple machines, properties of matter, fluid pressure, fluid motion, capillary phenomena; production, transmission and interpretation of sound; temperature and temperature measurements, gas laws and kinetic theory, heat capacity, latent heats, laws of vaporization, humidity measurements, heat conduction; elements of magnetism, laws of electrostatics, electrostatic induction and condensers; primary batteries, Ohms' law and its applications, measurements of resistance and electromotive force, measuring instruments, magnetic effects of a current, induced currents, induction coil, conduction through gases, properties of cathode rays and X-rays; radioactive substances and their radiations; laws of reflection and refraction of light, mirrors, lenses and lens combinations, microscopes, telescopes, spectra, spectrum analysis, colour, interference, crystallography, polarized light and saccharimetry.

In the laboratory the student learns the use of such instruments as the balance, vernier, spherometer, hydrometer, hygrometer, spectroscope, saccharimeter, electroscope. Verifications are made of Archimedes' principle, Boyle's law, laws of reflection and refraction, Ohm's law, etc. Measurements are taken of specific gravities, frequencies, specific heats, latent heats, electrical resistance, focal lengths, besides qualitative experiments illustrating the more important physical principles.

ANATOMY.

THE ROBERT REFORD PROFESSOR:—S. E. WHITNALL.
ASSOCIATE PROFESSOR OF HISTOLOGY AND EMBRYOLOGY:—J. C. SIMPSON.
LECTURER IN EMBRYOLOGY:—F. SLATER JACKSON.
LECTURER IN ANATOMY:—I. MACLAREN THOMPSON.
LECTURER IN DENTAL ANATOMY:—H. E. MACDERMOT.
LECTURER IN HISTOLOGY:—W. M. FISK.
SENIOR DEMONSTRATOR (IN CHARGE OF DISSECTING ROOM):—A. D. CAMPBELL.
DEMONSTRATORS OF ANATOMY:—L. H. McKIM. F. J. TEES. G. A. FLEET. L. L. REFORD. H. B. MALCOLM. A. ROSS. F. N. K. FALLS. H. M. YOUNG. A. J. MARTIN.

The course covers two years, and is planned so that after making a general survey of the whole body, the dental student concentrates his attention on the head and neck. He is thus enabled to study in greater detail those parts which are related to his particular province, and he avoids spending undue time over regions which possess no special educational or professional value for him. A special Lecturer supervises the work under the direction of the Professor.

First Year. One lecture and one practical demonstration in the dissecting room per week throughout the session. The lectures serve as introductions to the various systems of the body—osseous, muscular, nervous, vascular, digestive, etc. The demonstrations are designed to take the students in small groups over the whole body, illustrating and further explaining the systems noted above. The students can further handle and study for themselves the actual parts displayed.

Second Year:—Two lectures and ten hours dissecting per week throughout the session. The arm is first dissected as an introduction to technique methods and nomenclature. The thorax and abdomen are dissected with a view to understanding the functions of circulation, respiration, digestion,

excretion, etc. The head and neck are thoroughly dissected in detail. Osteology classes on the skull with special regional demonstrations are held, and special lectures given on the development of the face, palate and jaws. Dissected brains are demonstrated and studied to understand in particular the origin and connection of the cerebral nerves, the paths of reflex impulses, etc. Finally, demonstrations are given on the organs of special sense.

The work is supplemented by a course on the special anatomy of the teeth, conducted by the Dental Department.

Histology and Embryology.

Second Year:—One lecture and one laboratory period per week throughout the session.

The course includes:

(1) A survey of the general principles of embryology and of the early stages in the development of the human embryo.

(2) A detailed study of the fundamental tissues of the human body.

(3) A study of the development and microscopic structure of the organs and systems, in which the head and neck and the circulatory, digestive, and respiratory systems are considered in detail, whilst the remaining systems are treated in a more general way.

PHYSIOLOGY.

THE MORLEY DRAKE PROFESSOR:—JOHN TAIT.

LECTURERS:—F. GREEN. G. J. CASSIDY. N. GIBLIN.

ASSISTANT:—S. W. BRITTON.

DEMONSTRATOR:—JOHN ARMOUR.

The purpose of this course is to give the student an elementary knowledge of the whole subject of physiology with a more special knowledge of such aspects of the subject as bear more particularly on the practice of Dentistry. A full course of lectures, extending over one session, is given. In conjunction with the lecture course demonstrations bearing on physiology are given on patients in the hospitals.

Text-book:—Huxley's "Lessons in Elementary Physiology."

PHARMACOLOGY, MATERIA MEDICA AND PHARMACY.

PROFESSOR OF PHARMACOLOGY:—.....

PROFESSOR.—ALEX. B. J. MOORE.

DEMONSTRATOR:—W. BOURNE.

Instruction in this branch is given as follows:—

In the Second Year.—Lectures and demonstrations on the physiological action of drugs, especial attention being paid to those employed in dental

practice. The physiological action of the general and local anæsthetics is fully described and instruction in their use given in the laboratory. In this year also a course in Materia Medica and Pharmacy is given.

In the Third Year. A course in Materia Medica and Pharmacy is given.

This course of about twenty-five lectures and demonstrations covers pharmacognosy, therapeutics and toxicology;

Pharmacopœias—B.P., U.S.P., B.P.C., and various hospital formularies;

Drugs—All organic and inorganic chemicals such as:—alkaloids—glucosides, essential oils, stearoptenes, mineral salts, coal tar and its derivatives, animal products, synthetics, their sources and medicinal properties;

Therapeutical classification of drugs, such as:—anæsthetics, anodynes, antiseptics, caustics, hypnotics, hæmostatics, counter-irritants, etc., etc.;

Toxicology—Toxic doses of potent drugs with chemical and therapeutical antidotes; toxic drugs, their action and administration;

Habit-forming drugs—cocaine, heroin, morphine, etc.;

Posology—

Prescription Writing—Various systems of prescribing symbols, correct abbreviations, incompatibility;

Pharmacy—nomenclature, metrology, specific gravity, percentage solutions, sterilization;

Pharmaceutical Preparations—tinctures, pigments, spirits, collodions, hypodermic injections, mouth washes, dentifrices, fluid extracts, tablets, etc.;

Methods of Manufacture—

ORAL SURGERY.

LECTURER:—A. R. PENNOYER.

This will embrace a series of lectures on injuries and diseases of the mouth and jaws and their treatment. The clinics of the Montreal General Hospital afford ample material for students to observe and study disease conditions as well as to witness operations in the mouth.

DENTAL ANATOMY.

LECTURER:—A. CLIFFORD JACK.

This course, given in connection with general anatomy in the First Year, is to give the student a thorough knowledge of the size, shape, uses, and general construction of the natural teeth, their articulation and composition.

This is accomplished by lectures and demonstrations, with the use of drawings, models and lantern slides.

The student is first made to draw, then to model in clay, several teeth chosen by the lecturer. He then carves in ivory sixteen teeth, representing all the forms in the human mouth, which are then articulated anatomically. These are used later on by the student in his work in operative dentistry.

Different sections of extracted teeth are made, to familiarize the student with the relationship of the different structures composing the teeth.

The total time given this subject during the First Year is five hours a week for a period of twenty-six weeks, total one hundred and thirty hours, divided as follows:—one hour a week devoted to lectures, twenty-six hours; four hours a week to demonstrating, modelling, carving, making sections, etc., one hundred and thirty hours.

PATHOLOGY AND BACTERIOLOGY.

PROFESSOR OF DENTAL PATHOLOGY:—FRED G. HENRY.
PROFESSOR OF PATHOLOGY:—HORST OERTEL.
ASST. PROFESSOR OF BACTERIOLOGY:—A. A. BRUERE.
LECTURER IN PATHOLOGY:—C. T. CROWDY.
DEMONSTRATOR IN PATHOLOGY:—J. W. SCOTT.

Dental Pathology.

This course is given to the students of the Third and Fourth Years, and includes a consideration of the various diseases of the enamel, dentine, dental pulp and peridental membrane, their symptomatology and treatment, also a consideration of abnormal conditions of the tissues of the oral cavity with a description of treatment and management of these diseases.

Special attention will also be given to pathological conditions of the nerve structures of the head and their connections with the diseased conditions of the dental tissues.

The mitigation of pain in dental operations receives special attention and the various means employed fully developed and explained, and such directions given as will enable the student to avoid methods and drugs harmful to the tissues.

Bacteriology.

A course of lectures upon bacteriology in relation to disease for students of the Third Year; lectures given twice a week during the autumn term.

A practical course in the bacteriology of infectious diseases for students of the Third Year. Two periods a week during the autumn term.

MATERIA MEDICA AND THERAPEUTICS.

PROFESSOR:—FRED G. HENRY.

In the Fourth Year a course of demonstrations and lectures in this subject is given, extending throughout the whole session. This comprises the study of the physical properties, chemical composition and physiological

action of the various medicinal substances used in the treatment of diseased conditions of the dental organs and morbid conditions of the oral cavity, together with their various applications, doses, antidotes, and contra-indications, with instruction in prescribing, etc. Anæsthesia and the various anæsthetics are also taken up, following that already given in the Second Year.

CROWN AND BRIDGE WORK.

PROFESSOR:—A. W. THORNTON.

This subject will be taught (as an integral part of Prosthetic Dentistry) by a course of lectures and a series of laboratory demonstrations leading up to the clinical experience given the student in the Dental Clinic.

The general conditions which indicate and the principles which underlie the use of this method in the replacement of lost teeth will be considered, together with the preparation of the natural teeth for the reception of artificial crowns and partial plate attachments.

Concurrently with a description of the various artificial crowns given in the lecture room, the student will be required to construct them in the laboratory under the direction of a demonstrator.

Exhibition work is required in both crown and bridge work, to be placed in the hands of the Professor at the end of the winter term.

ORTHODONTIA.

PROFESSOR:—JAMES B. MORISON.

ASSOCIATE PROFESSOR:—A. W. MCCLELLAND.

The course in this branch will commence with the study of the dental organs during development and eruption.

Special attention will be given to the temporary teeth and the influence they exert in directing the normal occlusion of their permanent successors. The student will be directed to the importance of the study of the etiology of this subject, and its relation to the prevention and treatment of mal-occlusion. Cases deviating from the normal, typical of every variety met with in practice, will be dealt with and a classification made based on the treatment required.

The different methods employed in correcting these conditions will be fully demonstrated, together with the mechanical appliances used.

Ample clinical material is available at the Dental Clinic, where students in the final year will be allotted cases, the treatment of which will be carried on throughout the session.

OPERATIVE DENTISTRY.

PROFESSOR:—F. H. A. BAXTER.

LECTURER:—H. V. DRIVER.

The purpose of this course is to make the students thoroughly familiar with all modern and accepted methods. The course of lectures extends over two years and a half, and includes discussion of the treatment of caries; the preparation of cavities, the materials used for filling, the most approved instruments and appliances used in operating upon the teeth. Clinics will be held at the Dental Clinic, where ample material is provided and every available means used to make the student practically conversant with all the up-to-date knowledge on this important branch of dental science.

In conjunction with this course, operative technics is taken up, which provides a systematic course in manual training, thoroughly familiarizing the student with the anatomy of the teeth, and the shaping of cavities, from the simple to the more complex. This is carried out on models, using the different regular filling materials, scaling, bleaching, and, so far as possible, all of the operative procedures.

The Dental Clinic is open throughout the whole year, and students are advised to give as long a time to this work as possible. Each student must provide himself with the instruments necessary for his own use, a list of which will be furnished. He is required to perform all the usual dental operations as they present themselves, under the supervision of competent demonstrators, who are always at hand to offer advice and assistance under the direction of the Professor. Between the Second and Third Years, and also between the Third and Fourth Years, students are required to spend two full months doing practical work in the Hospital Clinic.

Porcelain:—This course consists of the study of porcelain in its various uses. It is taught by means of lectures and demonstrations, as well as by practical work by the students themselves under supervision.

Preparation of cavities for inlays, preparing matrices and the various methods in which porcelain may be employed in crown and bridge work are dwelt upon.

PROSTHETIC DENTISTRY.

PROFESSOR:—GEORGE S. CAMERON.

ASSOCIATE PROFESSOR:—J. S. DOHAN.

The course in prosthetic dentistry will embrace lectures, illustrated by lantern slides, and practical work in the laboratory under the supervision of the demonstrator of technics. It will include the preparation of the

mouth for dentures, impressions, and the properties of materials used in the construction of artificial dentures. The student will be required to construct the different forms commonly used. Attention is directed to the different functions to be performed by the denture in the restoration of the natural conditions as regards mastication, enunciation and the restoring of the features. Fractures of the jaw will be discussed, and the construction of interdental splints, as recommended by the different authorities, is detailed.

PROSTHETIC TREATMENT OF CLEFT PALATE.

LECTURER:—OLIVER MARTIN.

Associated with the Department of Prosthetic Dentistry; a short practical course on the prosthetic treatment of cleft-palate will be given at the Hospital Clinic, in which the students take an active part under direct supervision of the instructor.

DENTAL HISTORY, ETHICS AND ECONOMICS.

LECTURER:—F. A. STEVENSON.

History:—

This course is intended to give to the student an intelligent conception of the evolution and development of Dentistry from the primitive conditions and methods of the past to the present standing of the profession as a branch of the healing art. The relation of some of the outstanding men of the profession to this development will also be dealt with.

Ethics:—

Under this head the moral, social and business relationships between the dentist and his patient will be discussed, as well as his duty to the public, his fellow practitioner and himself.

Economics:—

Under this head the business of the dentist's life will be considered. The questions of office equipment, keeping of appointments, overhead charges, methods of determining fees, office assistants, etc., will be taken up.

METALLURGY.

PROFESSOR:—ALFRED STANSFIELD.

LECTURER:—GORDON SPROULE.

This course is given to Dental students of the Second Year by the Metallurgical Department of the University.

It consists of twelve lectures of one hour, and twelve laboratory periods of two and a half hours each.

The lecture course covers:—

(1) Introductory lectures on the physical and chemical properties of metals, especially in relation to their use in dentistry.

(2) Methods of melting, casting and alloying metals in the laboratory.

(3) Methods of extracting metals from their ores.

(4) The nature and preparation of alloys, including amalgams.

(5) The metals used in dentistry (lead, zinc, tin, bismuth, cadmium, antimony, aluminium, copper, silver, gold, platinum, iridium, mercury, iron and steel) are considered separately in regard to their properties, uses in dentistry, and, as far as time allows, extraction from their ores. The separation, purification and alloying of gold, silver and platinum are specially considered.

(6) The manufacture, properties and uses of dental amalgams.

Text-book:—J. D. Hodgen, "Practical Dental Metallurgy."

The laboratory course includes experimental work with the metals: gold, silver, copper, lead, zinc, tin, and aluminium.

The metals are melted, alloyed, cast, hammered, filed, cut, rolled, annealed and tested with acids and other chemicals.

The preparation of pure gold and silver is carried out and the production and testing of dental and other amalgams.

The lectures are given by Dr. A. Stansfield, and the laboratory instruction by Mr. Sproule.

The course is given during the first term of each session.

DENTAL JURISPRUDENCE.

PROFESSOR:—D. D. MACTAGGART.

LECTURER:—W. L. BOND.

In this course the lecturer will discuss the laws governing the practice of Dentistry, their necessity and purpose.

The responsibility of the dentist under the laws of the Province, his position as defendant in suits for damages and as plaintiff in suits for fees, etc., will be fully explained.

CLINICAL INSTRUCTION.

Clinical instruction is given in the Operating Theatre and Out-Patient Department and in the Dental Clinic of the Montreal General Hospital. Abundant opportunity is afforded in this institution for the study of diseased conditions of the mouth and jaws, and for watching operations on these regions. The Dental Clinic, established twelve years ago by the Hospital authorities, proved a success from the outset, and ample material for clinical study is now provided. Fifteen thousand patients were treated at this clinic during the past session.

Students are required to attend the clinic every day during the Third and Fourth Years from nine to twelve o'clock and from one-thirty to five o'clock, except during such part of the time as may be taken up with lectures or other work of the University course. Instruction is given by Professor Thornton, Dental Surgeon in charge, assisted by the Superintendent and a capable staff of demonstrators. Anæsthetics are administered by members of the resident staff of the Hospital, who give practical instruction in this most important branch. A nurse is also in attendance during clinic hours.

PHYSICAL EDUCATION.

DIRECTOR.—ARTHUR S. LAMB, B.P.E., M.D.

UNIVERSITY MEDICAL OFFICER:—F. W. HARVEY, B.A., M.D.

All students on entering the University are required to pass a physical examination. They are then divided, according to the result of this examination, into five classes:—

(*a*) Fit for all forms of physical exercise.
(*b*) Fit for a limited number of forms.
(*c*) Fit for gymnasium work only.
(*d*) Fit for remedial gymnastics or temporarily unfit.
(*e*) Unfit for any forms of physical exercise.

At the time of his medical examination each student is required to fill in a card indicating his choice of physical activity which he will be allowed to follow, unless debarred for medical reasons, under which circumstance he will be given a further choice among other recognized but less strenuous forms of exercise or will do gymnasium work as the case may require.

Physical education is compulsory for all students of the first two years. Two periods per week will be devoted to it.

Unexcused absences up to one-eighth of the required number of periods shall be allowed. Unexcused absences exceeding one-eighth, but not exceeding one-fourth, may be allowed if at the end of the session the student passes a special examination and satisfies the Director that he has made sufficient progress. Unexcused absences exceeding one-fourth shall disqualify a student. Such students shall be required to take extra gymnasium class work to the satisfaction of the Director, a supplemental course being given in the month of September for this purpose.

At regular intervals during each session and also at the end of each session, the Director of Physical Education shall furnish the Dean of each Faculty with a list of students who have failed to meet the attendance requirements as laid down in the ordinary curriculum, or who have proved unsatisfactory in other respects, and such cases shall be dealt with by the respective Faculties.

No student in default shall be allowed to proceed to the next year of his course unless for special reasons exemption should be granted on the

recommendation of his Faculty and approved by the Committee on Physical Education.

Not less than one month before the conferring of degrees in each session the Director shall furnish to the Registrar of the University, for transmission to Corporation and the Faculties concerned, a list of all students, being candidates for degrees at the forthcoming Convocation, who have failed to satisfy the requirements of the Committee on Physical Education, and no Diploma for a degree shall be issued to any such candidate unless by the express direction of Corporation.

LIBRARY.

In conjunction with the Medical Library, which contains all the standard text-books in the branches of the first two years in Dentistry, there is a splendid departmental library dealing exclusively with dental subjects. Students may consult any work of reference in the Library between 9 a.m. and 6 p.m.; Saturdays, 9 a.m. to 5 p.m.

MUSEUM.

In connection with the Pathological Museum of the Medical Faculty there is a very good collection of plaster casts of deformities of the jaw, etc., and also a very large collection of teeth of all varieties. During the session the Dental Museum will be available for teaching purposes.

FACULTY OF MUSIC.

SESSIONAL ANNOUNCEMENT.

The work of the Conservatorium of Music for the session 1923-24 will begin on September 17th, 1923, and will end on June 14th, 1924. It consists of three terms of eleven weeks each, **with an additional summer term of three weeks, viz.:—**

(a) September 17th to December 1st.
(b) December 3rd to March 1st, (Christmas vacation, Dec. 24th to Jan. 5th inclusive).
(c) March 3rd to May 24th (Easter vacation, April 18th to April 24th inclusive).
(d) May 26th to June 14th (short summer term).

Lectures, arranged in progressive courses, are offered as forming part of a connected curriculum, leading to Certificates and Diplomas, as well as to Degrees in Music in the University.

The Lectures will begin in the second week of October, and extend over three terms of ten weeks each, viz.—

(a) October 8th to Dec. 15th.
(b) December 17th to March 15th.
(c) March 17th to May 24th.

The Examinations in Montreal for Certificates and Diplomas will be held towards the end of the third term, i.e., from May 19th to May 31st. The Theoretical Examinations which precede the Practical Local Examinations will be held on May 7th.

ADMISSION.

Students of the Conservatorium will be admitted either as:—

Regular Students, taking an organized course, which includes individual instruction in a First and Second Subject, together with such classes and lectures as may be thought advisable by the Director, leading to the Diploma of Licentiate in Music, or the Degree of Bachelor of Music in the University.

Senior Partial Students, who, besides individual instruction in the one principal subject, take two classes. Instrumentalists will, at the discretion of the Director, be assigned to two of the following classes: Theory, Harmony, History, Form and Analysis, Ensemble Playing. Vocalists will be assigned to two of the following classes:—Theory, Sight-Singing, Elocution and Diction, Choral Class.

CONSERVATORIUM REGULATIONS.

1. Fees will not be refunded, nor will the length of the term be extended on account of temporary absence. Absence from lessons caused by prolonged illness may be allowed for, provided the Secretary is notified and a Doctor's certificate presented.

2. No business matters can be arranged through the instructors, but must be transacted through the office.

3. Students cannot register for less than a term and must notify the Secretary, at least a week before the end of the term, if they wish to discontinue lessons, otherwise it is understood that lessons will be continued through the following term.

4. Any lessons missed in consequence of the instructor's absence will be made up at the mutual convenience of instructor and pupil. Lessons missed by students will be their loss, unless a Doctor's certificate is produced.

5. An attendance book is kept by each instructor, and the Secretary is notified of any irregularity of attendance or absence of pupils through serious illness.

6. Every partial student must attend at least two-thirds of the lecture classes in each term, or in default be charged the higher fee as a repertoire student.

7. No student suffering from an infectious or contagious disease, or who is, in the opinion of a competent medical attendant, in any way brought into contact with any person infected with such disease, will be admitted.

8. Students are required to be punctual at lessons, lectures, concerts and examinations.

9. Notices on the bulletin boards are official, and students are requested to pay due attention to such as may be posted there.

10. No change in course or teacher can be made without first obtaining the consent of the Director.

11. Students must be prepared for examinations by the instructor to whom they are assigned.

12. Students wishing either to take part in any public musical performance, publish a composition, or accept a professional engagement, must first obtain the consent of the Director.

13. The name of each lecturer and the hours at which the classes are held will be posted on the notice boards.

14. None but registered students of the Conservatorium can take part in either recitals or concerts.

15. Visitors will not be allowed to be present during any lesson (class or private) except by permission.

16. The Director has the right to refuse or to cancel at any time the registration of any individual whose presence in the Conservatorium may appear to be detrimental to its interests.

17. Smoking within the building is absolutely prohibited.

18. On registration all students are required to pay a fee of $4.00, which will entitle them to two admission tickets to the three Orchestral Concerts, Staff Recital, Students' Recitals and other events which may from time to time be arranged for their benefit by the Director.

REQUIREMENTS FOR DEGREES AND DIPLOMAS.

DEGREE OF DOCTOR OF MUSIC.

Bachelors of Music of McGill University, after a lapse of a period of five years from the time of taking the Degree of Bachelor of Music, may proceed to the Degree of Doctor of Music, the requirements for which are a composition in extended form, such as an oratorio, opera or cantata. This exercise must have as its first number an introductory orchestral movement in the form of a concert overture, must contain some eight-part writing and fugal treatment, and must be scored for a full orchestra. If preferred, a candidate may present a composition scored for full orchestra in the form of a symphony, symphonic poem or tone poem occupying no less than forty minutes in performance. The University may, if it elects to do so, order the candidate to give a public performance of this original and unaided composition, when approved by the examiners, in some public building connected with the University. In addition, an examination in the higher forms of composition shall be necessary, together with a critical knowledge of the full scores of certain prescribed works.

Graduates of other Universities can, on payment of the necessary fees, be admitted "ad eundem" to the Degree of Mus. Bac., if they wish to proceed to the further degree of Mus. Doc., provided they secure permission to do so from the executive of the Faculty of Graduate Studies and Research.

Full particulars can be obtained from the Registrar of the University.

DEGREE OF BACHELOR OF MUSIC.

All candidates for this degree must pass the following examinations:—

1. The Matriculation examination.
2. The First examination in Music (at the end of the first year).
3. The Second examination in Music (at the end of the second year).
4. The Final examination in Music (at the end of the third year).

A specimen set of papers for each of the three examinations in Music can be obtained from the Secretary, price 25c. each.

The Matriculation Examination.

The Matriculation Examination is held yearly, in June and September, at McGill University and at various centres throughout the Dominion. Candidates for musical degrees will be examined in the following:

1. English (two papers).
2. History (one paper).
3. Two out of the following languages:—French, German, Latin, Italian, Spanish (two papers in each of the two languages chosen by the candidate).
4. Arithmetic or Algebra or Geometry (one part).
5. Rudiments of Music (musical intervals, scales, clefs, time signatures, construction of chords, elementary harmony to chord of dominant seventh) (one paper). The paper set will be similar to that for the Senior Grade of the local examinations in Music.

Further information with regard to this examination, and exemption therefrom through the possession of certain equivalent certificates, can be obtained from the Registrar of the University. Before being admitted to Undergraduate courses in Music, candidates must satisfy the Dean of the Faculty of Music that they are sufficiently advanced in their chief and second practical studies.

First Examination in Music.

(a) Advanced rudiments.

(b) Harmony in three and four parts.

(c) Counterpoint up to three parts.

(d) Form and analysis. Questions will be given on accent, cadence, metre, rhythm, phrasing, etc., and on form shown in the works of the classic composers.

(e) General outlines of musical history.

(f) Chief and second practical study. One of these may take the form of the composition of a song or songs, or a miniature suite for a solo instrument or any combination of instruments.

Second Examination in Music.

(a) Harmony in not more than four parts.

(b) Counterpoint in not more than four parts.

(c) Canon in two parts and fugal exposition up to four parts.

(d) History of music from the 16th century to present day.

(e) Form and analysis. The candidate must show an intimate knowledge of a few compositions, the names of which will be supplied on application, at least three months before the date of examination.

(f) Elementary knowledge of acoustics or physiology of the voice.

(g) Chief and second practical study, or, instead of one of these, the composition of:—

(1) A movement in sonata form for pianoforte (or piano and violin, or any other combination),

or

(2) A choral movement with independent accompaniment,

or

(3) A suite for strings.

The possession of the Diploma of Licentiate of Music obtained either under Class I. or Class III. from McGill University exempts candidates from the necessity of taking the First and Second Examinations for Mus. Bac., and, accordingly, candidates can proceed direct to the Final Examinations, provided that they have matriculated.

Final Examination in Music.

(a) Harmony up to five parts.
(b) Counterpoint up to five parts.
(c) Double Counterpoint in 8ve, 10th, and 12th.
(d) Canon and fugue in three and four parts.
(e) History of music from the earliest time to the present.

(f) Form and analysis. Knowledge will be required of such works as the following:—Bach's 48 Preludes and Fugues; Beethoven's Pianoforte Sonatas; Schubert's, Schumann's, and Brahms' Songs; Mendelssohn's Psalms and such Oratorios as Elijah and St. Paul, Symphonies and Overtures by Mozart, Beethoven, Brahms, Mendelssohn. Candidates should send in a list of works in which they are prepared to be examined, a few weeks before the date of examination.

(g) Instrumentation. A knowledge of the compass and capabilities of all instruments in the modern orchestra and the scoring of a given passage in a given time; also the reading at sight of a short excerpt from an easy score of a classic composer.

(h) Chief and second practical study or, in lieu of both of these, a composition can be sent in by the candidate, containing four-part chorus, a solo or duet, an unaccompanied quartette and a four-part fugue. The whole work (except the quartette) must be scored for stringed instruments in such a way as to show considerable independence between voices and instruments. If preferred, this composition can take the form of a string quartette containing not less than three movements.

REGULATIONS FOR DIPLOMA OF LICENTIATE OF MUSIC.

Candidates may elect to be examined either in:—
Class 1—Theoretical Subjects and Composition, or
Class 2—Practical Subjects as Performers, or as
Class 3—Teachers in both Theory and Practice.
The following are the requirements of each branch:—

CLASS 1.—THEORETICAL SUBJECTS AND COMPOSITION.

First Examination.

(a) Advanced Rudiments, including Sight Reading and Ear Tests.

(b) Harmony in four parts up to and including chords of the ninth, passing notes and suspensions; also the Harmonization of a Melody.

(c) Counterpoint in two parts.

(d) Viva voce examination in rudimentary Composition and Extemporization.

N.B.—If candidates can produce certificates of having passed in the Highest Grade of the theoretical local examinations, they will be excused all but the last test, which can be taken at the same time as the second examination.

Second Examination.

Requirements a, b, c, d, and e are the same as those for the First Examination for Mus. Bac.

(f) Composition of a song (or two short songs) or a miniature suite for piano (or piano and violin, or any other combination). The MS. should be sent in at least a month before the date of examination to the Secretary of the Examining Board, McGill Conservatorium of Music, Montreal.

Third Examination.

Requirements a, b, c, d, e, and f are the same as those of the Second Examination for Mus. Bac.

(g) Practical work at Pianoforte or Organ. The requirements are those of the Senior Grade of the practical local examinations. Exemption from this test may be claimed if candidates possess certificates showing that they have passed that examination.

(h) Composition of (1) a movement in Sonata form (for either pianoforte, or organ, or violin and piano, or any other combination); or (2) a Chorus with independent accompaniment; or (3) a Suite for Strings. This should be sent in beforehand.

CLASS 2.—PRACTICAL SUBJECTS AS PERFORMERS.

First Examination.

(a) Rudiments of Music, including Sight Reading and Ear Tests.

(b) Easy Transposition Tests (for instrumentalists only).

(c) Diction in respect of Modern Languages (for singers only).

(d) Practical work either as Vocalist or Instrumentalist, in Principal Study, the requirements of which will be those of the Highest Grade of the practical local examinations.

Second Examination (Semi-Final).

The requirements for candidates whose chief study is either pianoforte, or violin, or violoncello, or organ, or singing, will be found under separate headings.

PIANOFORTE.

(No written examination.)

1. *Scales.*
   Major, minor (both forms) and chromatic scales at the distance of 8ve, 3rd, and 6th; also in double 3rds and double 8ves.
   The candidate must be prepared to play all the above-mentioned scales in all keys, in either similar or contrary motion, beginning on either the highest or lowest notes, and with either legato or staccato touch.

2. *Arpeggios.*
   Common chords, dominant and diminished 7ths, with inversions and with hands either an 8ve, 3rd, 6th, or 10th apart, in similar and contrary motion, also in double octaves, legato and staccato.

3. *Reading at Sight.*

4. *Transposition.*
   Of a short passage a semitone above or below.

5. *Performance.*
   (a) One of the more difficult of the 48 Preludes and Fugues, or, Part of a Suite or Concerto ..... J. S. BACH
   (b) One of the more difficult Etudes, Op. 100, Bk. I ..... KESSLER
   or
   Etude. No. 5 ..... PAGANINI-LISZT
   (c) Sonata, Op. 26 or Op. 28 (D major) ..... BEETHOVEN
   (d) Any one of the Novellettes ..... SCHUMANN
   or
   Arabesque ..... SCHUMANN
   or
   Ballade in F, Op. 10, No. 2 ..... DEBUSSY
   or
   Any one of the following Etudes. Op. 10, Nos. 4, 5. Op. 25, No. 16 ..... CHOPIN
   (e) A piece of the candidate's own choice.
   Questions will be asked on the general outlines of form shown in the pieces and also on the general outlines of musical history.
   Candidates must be prepared to answer any advanced questions on rudiments of music.

VIOLIN.

(No written examination.)

1. *Scales.*
   C major in thirds, sixths, and octaves, one note to each bow, through two octaves. Also any of the ordinary scales through three octaves with various bowings. Chromatic scale starting from F in the first position (D string) through two octaves.
2. *Arpeggios.*
   All major and minor common chords, dominant 7ths, and diminished 7ths in three octaves. No. 7 from Sevçik Violin School, Op. 1, Part III, may be presented for this test.
3. *Reading at Sight.*
4. *Performance.*
   Candidates must prepare any two Etudes from each of the following composers:—Kreutzer, Fiorillo, and Rode, and also play the first movement of No. 22, Concerto, Viotti, or a first movement from any one of the Spohr Concertos.
5. *Questions.*
   Questions will be asked on the general outlines of form shown in the pieces, and also a few on the general outlines of musical history. Candidates must be prepared to answer any advanced questions on rudiments of music.

VIOLONCELLO.

(No written examination.)

1. *Scales.*
   Major, minor (melodic form), and chromatic scales in all keys.
2. *Arpeggios.*
   Studies Nos. 10 and 15 ..... J. L. DUPORT.
3. *Reading at Sight.*
4. *Performance.*
   (a) Suite No. 2 ..... J. S. BACH
   (b) Sonata (last two movements) ..... BRAHMS

   or

   Sonata No. 1 (First Movement) ..... BEETHOVEN

   or

   Sonata No. 1 (First Movement) ..... MENDELSSOHN

   (c) Also any two of the following pieces:—

   Rondo ..... BOCCHERINI
   La Serenata (published by Schirmer) ..... V. HERBERT
   Le Soir (published by Leduc) ..... L. VIERNE

5. *Questions.*
Questions will be asked on the general outlines of form shown in the pieces, and also a few on the general outlines of musical history.
Candidates must be prepared to answer any advanced questions on rudiments of music.

VIOLA, DOUBLE-BASS, HARP AND WIND INSTRUMENTS.

Requirements will be forwarded to candidates on application to the Secretary, 323 Sherbrooke Street West, Montreal.

ORGAN.

(No written examination.)

1. *Scales.*
(a) Manuals only (with both hands).
(b) Pedals only.
(c) One manual only with pedals, at varying degrees of speed and beginning with either the highest or lowest note.
In the case of (a) and (c) contrary motion may be required.
2. *Arpeggios.*
(a) For pedals through two 8ves; common chords, major and minor, in keys of C, D flat, D, E flat, E, and F.
(b) One hand and pedals combined, in contrary motion.
3. *Reading at Sight.*
4. *Transposition.*
Of a short passage, a semitone above or below.
5. *Performance.*
Prelude and Fugue in G major.....J. S. BACH
(Vol. VIII, Bridge and Higgs' Edition)
Elegie and Toccata-Prelude.....BAIRSTOW
(Published by Augener)
or
Three Rhapsodies No. 2 or No. 3.....H. HOWELLS
(Published by Augener)
6. *Questions.*
Questions will be asked on the general outlines of form shown in the pieces, and also a few on the general outlines of musical history.
Candidates must be prepared to answer any advanced questions on rudiments of music.

SINGING.

(No written examination.)

1 *Scales and Technical Exercises.*
Major, minor, and chromatic scales at varying degrees of speed.

(For examples, see Randegger's Singing Primer, pages 38, 41 and 48.) Also any six of the technical exercises given on pages 161 to 169 of the same work, selected according to voice.

2. *Arpeggios.*
See Randegger's Singing Primer, pages 102, 104 and 107.

3. *Reading at Sight.*

4. *Prepared Work.*
Studies.
Soprano or Tenor—Any two from No. 1 to No. 17 Fourth Series.
Part 1. 30 Solfeggios.....VITTORIO RICCI
Alto or Bass—Any two from No. 1 to No. 17 Fourth Series.
Part II. 30 Solfeggios.....VITTORIO RICCI
Medium Voices—Any two from No. 1 to No. 17 Fourth Series.
Part III. 30 Solfeggios.....VITTORIO RICCI
The selection of the pieces to be rendered in this examination is left to the candidates, who must, however, choose music of the following character:—
(a) One or two specimens of Recitative.
(b) Two solos from an Oratorio or Oratorios.

or

Two Solos from an Opera or Operas.
(c) One song by any of the following composers:—SCHUMANN, SCHUBERT, FRANZ, BRAHMS, LOEWE, PARRY, ELGAR, WOLF, HENSCHEL, STANFORD, RONALD, SCOTT, IRELAND.
(d) One song by any of the following composers:—GOUNOD, MASSENET, GERMAN, BALAKIREFF, LISZT, MALLINSON, MACDOWELL, GRIEG, HAHN, SIBELIUS.
(e) One or two specimens of Folk Songs.

6. *Questions.*
Questions may be asked as to the style of the pieces selected and the modulations or keys through which the music passes, etc.
Questions may be asked on the more advanced rudiments of music.

Third Examination (Final).

The requirements for candidates whose chief study is either Pianoforte, or Violin, or Violoncello, or Organ, or Singing, will be found under separate headings. There is no written examination.

PIANOFORTE.

1. *Transposition and Modulation Tests.*
The transposition of a passage a tone above or below.

Modulation. (Candidates are advised to make their modulations musically and not merely mathematically correct.)

2. *Sight Reading Test.*

3. *Questions.*
Questions will be asked on musical history from the 16th century to the present day.

4. *Performance.*

(a) Prelude and Fugue C sharp major Bk. 1 or
A flat major, Bk. 2 ..... J. S. BACH

or

Toccata in G major ..... J. S. BACH

or

Fantasia and Fugue in A minor ..... J. S. BACH

or

Prelude and Fugue in E minor ..... MENDELSSOHN

(b) Any two of the following Etudes. Op. 10, Nos. 1, 2, 7, 8. Op. 28, No. 8 ..... CHOPIN

or

Two contrasted studies from Books II or III Op. 100 .... KESSLER

or

Etude in A flat ..... LIADOFF

(c) Sonata, Op. 109, or Op. 90, or Op. 110 ..... BEETHOVEN

(d) Carneval de Vienne, Op. 26 ..... SCHUMANN

or

Sonata in E minor ..... SJÖGREN

or

Scherzo, Op. 4 ..... BRAHMS

or

A Concerto by a classical or modern composer .....

(e) Lotus Land ..... CYRIL SCOTT

or

Slavonic Dances, Op. 46 (any two) ..... DVOŘÁK

or

Reflets dans l'eau ..... DEBUSSY

or

Fantasia in A flat, Op. 49 ..... CHOPIN

(f) Au bord d'une source
Tarantelle } ..... LISZT

or

Danse des Elfes ..... SAPELNIKOFF

(g) A piece of the candidate's own choice.

NOTE.—Candidates must be prepared to play some, if not all, of these from memory.

5. *Short Examination in Second Study.*

Certificates gained in any of the three highest grades of the local practical examinations will exempt candidates from this test, whether the subject chosen is Organ or Violin, or Violoncello, or Singing.

VIOLIN.

1. *Sight Reading Test.*
2. *Questions.*

Questions will be asked on Musical History from the 16th century to the present day.

3. *Performance.*

(a) First movement of any of the ten Sonatas.....BEETHOVEN
(For Violin and Pianoforte.)
And any one movement of either of the two Sonatas..JOHN IRELAND

(b) Any one of the following Concertos may be selected by candidate:—BEETHOVEN, MENDELSSOHN, ERNST in F sharp minor, PAGANINI, VIEUXTEMPS, TSCHAIKOWSKY, SAINT-SAËNS in B minor, BRAHMS, ELGAR, WIENIAWSKI, BRUCH, LALO.

(c) Romance in F minor.....SINDING
Havannaise.....SAINT-SAËNS
Rhapsodie Piedmontèse.....SINIGAGLIA

4. *Short Examination in Second Study* (which must be the Pianoforte).

Certificates gained in any one of the three highest grades of the local practical examinations in pianoforte will exempt candidates from this test.

VIOLONCELLO.

1. *Reading at Sight.*
2. *Questions.*

Questions will be asked on Musical History from the 16th century to the present day.

3. *Performance.*

Sonata in A major (1st movement).....BEETHOVEN
Serenade-Waltz.....HERBERT SHARP
Spanish Nocturne.....E. GOOSENS
(Pub. in one book by Hawkes & Son)
Concerto in A minor.....SAINT-SAËNS
Sonata.....GRIEG
A la fontaine (Fischer Edition).....DAVIDOFF

4. *Short Examination in Second Study* (which must be the Pianoforte).
Certificates gained in any one of the three highest grades of the local practical examinations will exempt candidates from this test.

ORGAN.

1. *Transposition and Modulation Tests.*
The transposition of a passage into another key not exceeding a tone above or below. Modulation.—Candidates are advised to make their modulations musically and not only mathematically correct.
2. *Sight Reading Test.*
3. *Questions.*
Questions will be asked on Musical History from the 16th century to the present day.
4. *Performance.*
Of one piece from each of the following lists:—
(a) Sonata in E flat.....BACH
Prelude and Fugue in D major.....BACH
Introduction and Passacaglia.....MAX REGER
Introduction, Passacaglia and Fugue (published by Ditson).....HEALEY WILLAN
Fantasia in F minor.....MOZART
(b) Sonata in D minor.....RHEINBERGER
Sonata in E minor.....MERKEL
Sonata in C sharp minor.....HARWOOD
Sonata No. 4 in B flat major.....MENDELSSOHN
(c) Postlude in E flat.....GUILMANT
Dithryamb.....HARWOOD
Fantasia in E flat.....SAINT-SAËNS
Symphony No. 5 or No. 6, any two movements.....WIDOR
5. *Short Extemporization on a Given Theme.*
Optional test.
6. *Short Examination in Second Study.*
Certificates gained in any one of the three highest grades of the local practical examinations will exempt candidates from this test, whether the subject chosen is Pianoforte, or Violin, or Violoncello, or Singing.

SINGING.

1. *Performance.*
(a) Studies:
Soprano or Tenor—Any two from No. 18 to the end of the Fourth Series, Part I, of 30 Solfeggios.....VITTORIO RICCI
Alto or Bass—Any two from No. 18 to the end of the Fourth Series

Part II, of 30 Solfeggios.....VITTORIO RICCI
Medium Voices—Any two from No. 18 to the end of the Fourth Series Part III, of 39 Solfeggios.....VITTORIO RICCI

(b) The solo work from part of an Opera (an act or scene), or the solo work from a whole Oratorio.

(c) Songs in various languages to exemplify proficiency in diction.

2. *Sight Reading Test.*
3. *Questions* on Musical History from the 16th century to the present day.
6. *Chief Study.*

The studies by Vittorio Ricci must be prepared by all candidates, but as types of voices and capabilities of vocalists differ so much, it is impossible to satisfactorily specify other work on which any individual candidate shall be examined. The Examining Board will be prepared to accept in the Final Examination any works on which a correct judgment can be formed as to whether the candidate shall, after examination, be awarded the Diploma:—

(a) As soloist for Concert Work only.
(b) As soloist for Light Opera.
(c) As soloist for Grand Opera.
(d) As soloist for Oratorio.
(e) As soloist for a combination of any of these.

Candidates should, after passing the Second Examination, submit to the Board of Examiners, through the Secretary, a list of works which they propose to present for the Final Examination.

Second Study (which must be the Pianoforte).

Certificates gained in any one of the three highest grades of the local practical examinations for Pianoforte will exempt candidates from this test.

The ability of candidates to play their own accompaniments on the pianoforte to the vocal work prepared by them for the examination, together with the reading of a song accompanied at first sight, will be accepted as second study.

CLASS 3.—TEACHERS' EXAMINATION (THEORY AND PRACTICE).

First Examination.

(Partly written and partly viva voce.)

1. Advanced Rudiments.
2. A knowledge of harmony up to chords of the 7th. Analysis of given chords or passages, and harmonization of an easy melody and figured bass.
3. Chief Study.

Candidates will be expected to show sufficient executive ability to perform the technical work, studies, and pieces contained in the

list for the current year's local examination in the Highest Grade. (Total exemption from this examination can be claimed if candidates can produce certificates of having previously passed the Senior Grade, theoretical, and the Highest Grade, practical, of the local examinations.)

Second Examination (Semi-Final).

(Partly written and partly viva voce.)

1. Harmony in three and four parts up to chords of the 9th, including suspensions and use of passing notes.
2. Counterpoint in two parts.
3. General outlines of Musical History.
4. The principles of Elementary Form and Analysis.
5. Chief Study.
   The requirements for this will be the same as for the Semi-Final Performers' Licentiate (see pages 20 to 23).
6. Second Study.
   The requirements will be similar to those of the Senior Grade of the local examinations.
   If the candidate's chief study is Singing, Pianoforte Accompaniment will be accepted as second subject.

Third Examination (Final).

(Written Examination.)

1. Harmony and Counterpoint in not more than four parts.
2. History of Music from the 16th century to the present day.
3. Form and Analysis.
4. Some acquaintance with the principles of the Physiology of the Voice or of Acoustics.
5. A paper on the Art of Teaching of the candidate's chief subject. Candidates must write a paper, which should be sent at least a week before the examinations, dealing with technical difficulties met with in teaching, and how to overcome them, also giving a graduated list of studies and pieces best adapted for the development of this branch of musical study. The paper must be the unaided work of the candidate, and be accompanied by a declaration to that effect.

Viva Voce Examination.

Requirements will be found under a separate heading corresponding to the candidate's chief subject.

PIANOFORTE.

1. (a) To demonstrate method of instruction as regards posture, finger-training, wrist and arm action, etc.
   (b) To illustrate gradations of touch.
   (c) To differentiate between mechanical and aesthetic expression.
   (d) To explain the principles of fingering, and, if required, to finger passages.
   (e) To distinguish between use and misuse of pedals.
   (f) To illustrate good part playing.
   If thought necessary by the examiner a student (not a pupil of the candidate) will be in attendance, so that the candidate may more easily and effectually demonstrate his or her ability to deal in a practical manner with the above points, and any others which may occur.
2. Candidates must be prepared to play the following:—
   (a) English Suite, No. 11, in A minor, or No. 4 or Prelude & Fugue No. 15 in G ..... BACH
   (b) Sonata. Op. 53, or Op. 57 ..... BEETHOVEN
   (c) Humoresque, or Carneval ..... SCHUMANN
   (d) Any one of the Etudes ..... CHOPIN
   and Rhapsodie Hongroise No. 13 or 14 ..... LISZT
   (e) A piece of the candidate's own choice by a modern English French or Russian Composer.
3. Sight Reading Test.

VIOLIN.

1. To demonstrate method of finger-training and bowing, posture, and fingering, also to finger and bow certain passages, if required.
2. With a student in attendance (who must not be a pupil of the candidate), to give that student a specimen lesson, correcting, if necessary, any errors in bowing, intonation, posture, fingering, etc., and to answer questions and offer suggestions on the work after the student has retired.
3. To differentiate between mechanical and aesthetic expression.
4. To show ability to accompany on the pianoforte.
5. Candidates must be prepared to play any two Studies chosen by themselves from each of the following:—KREUTZER, FIORILLO, RODE ROVELLI and GAVINIES.
6. Pieces.
   First movement of any of the ten Sonatas for Violin and Pianoforte ..... BEETHOVEN
   La Folia ..... CORELLI-LEONARD

Concerto:
Any of the following:—BEETHOVEN, MENDELSSOHN, ERNST in F sharp, PAGANINI, VIEUXTEMPS, TSCHAIKOWSKY, SAINT-SAËNS in B minor, BRAHMS, WIENIAWSKI.
Romance in B minor.....SINDING
or
Havannaise.....SAINT-SAËNS
or
Rhapsodie Piedmontèse.....SINIGAGLIA

7. Sight Reading Test.

VIOLONCELLO.

See under Violin for requirements 1, 2, 3, 4 and 7.
Candidates must be prepared to play:
Nos. 11, 16 and 20.....DUPORT
Any one of the five Sonatas (selected by the candidate).....BEETHOVEN
To show a general knowledge of the Six Suites.....J. S. BACH
Also, "A la Source," Op. 20, No. 2.....DAVIDOFF
Romance.....WAGNER-POPPER

ORGAN.

1. To demonstrate method of instruction by means of a specimen lesson given to a student (not a pupil of the candidate) for overcoming difficulties in pedal technique, clear part playing, independence of hands and feet, position of body, stop management, etc.
2. To answer questions and offer suggestions after the student has retired as to the improvements which may be necessary.
3. To answer questions as to the causes of difference of tone between the various stops.
4. To explain the principles of pedalling and mark passages submitted to candidates for that purpose.
5. To be prepared to play the following pieces:—
   A Sonata by Bach, also a Sonata by either Mendelssohn or Rheinberger or Merkel, and a piece by a modern composer selected by the candidate.
6. Sight Reading Test.
7. To extemporize and transpose.

SINGING.

1. To demonstrate method of instruction by means of a specimen lesson given to a student (not a pupil of the candidate) in proper methods

of breathing, tone, attack, unevenness of tone, intonation, expression, overcoming of awkward breaks, resonance, facial expression and posture.

2. To make a report and offer suggestions after the student has retired.
3. In passages given by the examiner, to phrase or put in breath marks.
4. Candidates must be prepared to give illustrations of Recitative, Solo singing in Opera or Oratorio, and to sing one song of any one composer in each of the following three groups:—

(a) BACH, HANDEL, MOZART, BEETHOVEN, MENDELSSOHN, SCHUBERT, SCHUMANN.

(b) FRANZ, BRAHMS, LOEWE, WOLF, STRAUSS, PARRY, ELGAR.

(c) GOUNOD, MASSENET, GERMAN, BALAKIREFF, LISZT, MALLINSON, GRIEG, HAHN, and DEBUSSY.

To read (at the pianoforte) a simple accompaniment at sight, and also transpose within the limits of a major second above or below.

EXAMINATION FOR CERTIFICATE SHOWING CANDIDATE'S FITNESS AS MUSIC INSTRUCTOR FOR CLASS WORK IN THE ELEMENTARY SCHOOLS.

Fee $6.00

THEORETICAL.

The examination will be in two parts: (a) Written; (b) Viva Voce.

In the written part of the examination a paper will be given dealing with the general questions on the teaching of class singing in an elementary school.

The paper will be divided into four parts: (a) Voice Training; (b) How to teach Sight Singing in the Movable Doh System, using Solfa syllables only, and on its application to the staff notation; (c) Ear Training; (d) The teaching of songs.

As regards (b) emphasis will be laid on the mental effect produced when teaching tune, and on the use of time names when teaching rhythm in both notations.

The following text books are recommended:—

"Voice Culture," Part I; Chap. 1-3 inclusive ..... BATES
(Published by Novello)

"The School Music Teacher," Chap. 1-7 inclusive and Appendix II and III (Published by Curwen) ..... EVANS and MCNAUGHT

PRACTICAL (ELEMENTARY).

1. Sight Singing.
   Two tests will be given, one in Solfa syllables only and one in Staff Notation, containing leaps to any note of the diatonic scale, with a transition to either 1st sharp (dominant) or 1st flat (subdominant) key, and containing chromatic notes introduced stepwise. Only the following divisions of the beat will be used, half beat, three-quarters and a quarter, with some sustained notes. In Staff only the following time-signatures will be used, 2/4, 3/4, 4/4, 6/8. One of the tests will be in the minor mode, containing the sharpened sixth and seventh. (Not more than three attempts will be allowed, and the last time the test will be sung to la.)
2. Time.
   Two tests will be given, one to Solfa syllables, and one in Staff Notation, to be sung first to time-names, and then to a monotone. (Two attempts allowed.)

In 2/4, 3/4, and 4/4 time (two, three and four pulse measure) the beat may be divided, into halves, triplets, or any division containing one or two quarters. In 6/8 time (six-pulse measure) the more minute divisions of the beat will not be given.

3. Ear Test.

   (a) The candidate will write down in either notation a short phrase of not more than six notes. The name of the key will be given and the tonic chord (d.m.s.) sung or played each time.

   (b) The time names of a short passage will be asked and the passage must be written down in either notation. The tempo will be given. (Two attempts allowed.)

4. Candidates must be prepared to write on a black-board, as for a class, a short sight-singing test in both notations.

EXAMINATION FOR CERTIFICATE SHOWING CANDIDATE'S FITNESS AS MUSIC INSTRUCTOR FOR CLASS WORK IN HIGH SCHOOL OR COLLEGIATE INSTITUTE.

Fee $10.00

PART I (THEORETICAL).

A paper will be given demanding a more comprehensive knowledge of the methods and principles involved in the teaching of class singing. This paper will be divided into the same number of sections as the elementary paper, the following text-books being recommended for information:—

"Voice Culture," Part I. (published by Novello).....BATES
"The Singing Class Teacher" (published by Williams)..FIELD HYDE

Part II (PRACTICAL).

1. Sight Singing.

   Two tests will be given, one in Solfa Notation only, and one in Staff Notation, containing more difficult leaps as well as leaps to chromatic notes with a transition to some more remote key. One of the tests will be in the minor mode containing a transition. (Not more than three attempts will be allowed and at the last attempt the test must be sung to la.)

2. Time.

   Two tests will be given, one to Solfa Syllables and one in Staff Notation, sung first to time-names and then to la. (Two attempts allowed.) The pulse will be divided into more minute divisions, and syncopation will be introduced.

3. Ear Test.

   (a) The candidate will write down in either notation, in time and tune, a short melody. The name of the key will be given and the tonic chord (d.m.s.) sung or played each time.

   (b) The time names of a short passage will be asked and the passage must be then written down in either notation. The pulse will be more divided than in the elementary grade. The tempo will be given. (Two attempts allowed.)

4. Three school songs must be chosen and prepared by the candidate and sung to his or her own accompaniment. Two of the songs should be of the folk-song and one of the art-song type. Correct voice production and interpretation will be a necessity.

LOCAL CENTRE EXAMINATIONS IN MUSIC.

(For Centres with Local Representatives, see pages 392 to 394.)

Recognizing the necessity of helping to raise the standard of musical education in Canada, and at the same time to bring the influence of competent examiners to bear upon instruction, McGill University holds local examinations throughout the Dominion. In view of the fact that it grants Degrees in Music and a Diploma of Licentiate, the University extends its field of work by means of these local examinations, which are preparatory to those for Degrees and Diplomas.

The Examiners are appointed by the Board of Governors of the University, the Chairman of the Examining Board being Dr. Harry Crane Perrin, the Dean of the Faculty of Music and Director of the Conservatorium.

GENERAL REGULATIONS.

1. All fees must be paid in advance direct to the Secretary of McGill University Conservatorium of Music, 323 Sherbrooke Street West, Montreal, who will supply forms of entry. These can also be obtained from the local representatives or local secretaries. (See pp. 392 to 394.)

2. A local representative of McGill University will supervise the conduct of the theoretical examinations at each centre. All papers will be sent to McGill University itself, and, in the case of the local examinations, examined by a Board consisting of at least three examiners.

3. Every certificate gained by candidates in any of the public examinations will bear the imprimatur of McGill University.

4. The Principal of a school may arrange with the Secretary to send an examiner to report on the musical education gained at the school. No individual certificates will be awarded in this case, but merely a collective detailed report drawn up by the examiner and sent to the Principal of the school.

5. Similar arrangements may be made with regard to Class Singing.

6. In case of a candidate being prevented by serious illness from attending any examination, the Secretary is authorized, on receipt of a medical certificate, which must, however, reach him at least five days before such examination, to transfer a candidate to the next examination without further fee.

7. As an additional assurance of fair treatment of every candidate, two examiners will be present at each examination in practical subjects throughout the Dominion, wherever it is at all possible to arrange that such shall be the case. This must necessarily largely depend on the number of candidates presenting themselves for examination.

8. Examinations will be arranged by the Secretary when required, and new centres formed where not less than ten candidates are entered, provided the amount of fees is sufficient to meet the expenses incurred.

ADVICE TO TEACHERS AND CANDIDATES.

1. Candidates are advised not to attempt too high a grade when first entering for the local examinations, which are arranged in a systematic course of progressive grades, beginning with the Lowest or Primary grade and leading on through the Diploma examination for Licentiate of Music to that for the Degree of Mus. Bac.

2. Teachers as well as candidates are urged to regard the particular studies and pieces selected for examination in any one grade as indicating the degree of difficulty, and not to confine their attention for a whole year to the preparation of two or three examination pieces.

3. In preparation, teachers and pupils should use the music of the lower grades at the beginning of the winter, and should not begin too early with the actual grade book selected for examination at the end of the session. Lack of interest often ensues from the monotony entailed by candidates concentrating their whole attention on the examination book for too long a period.

4. Books for the last ten years, which contain well-assorted standard studies and pieces, will be found useful by teachers and pupils alike whether for repertoire study, reading at sight, or analysis purposes. Price 50c. per book, obtainable from the General Secretary.

REGULATIONS FOR LOCAL CENTRE EXAMINATIONS FOR CERTIFICATES.

1. Theory examinations will be held throughout the Dominion on May 7th, 1924. In the case of candidates wishing to take an examination in a practical subject in the same year as the theoretical examination,

the result of the latter will be communicated to them at least a week beforehand, so that, if successful in passing, they can proceed to the practical examination; if unsuccessful, they can still proceed to the practical examination, and if they satisfy the examiner or examiners in this, they must present themselves at a supplemental theoretical examination held later in the same year, which, if they pass, entitles them to receive the certificate for the practical examination. A special charge for this supplemental examination will be found under fees on page 395. An alternative is provided for unsuccessful candidates in the May theoretical examinations; instead of presenting themselves for the ensuing practical examinations they are either entitled to a refund of the proportion of fee paid or to present themselves for the examination of the same grade the following year.

2. Practical examinations will be held during May and June, 1924.

3. For both theoretical and practical local examinations, forms of application, duly filled in by the candidate, and accompanied by the examination fee, MUST REACH THE SECRETARY IN MONTREAL ON OR BEFORE APRIL 12th, 1924.

4. Certificates will be awarded to successful candidates in both theoretical and practical subjects. They will be of two kinds in each grade: (a) Distinction; (b) Pass.

5. These certificates do not entitle the holders to append any letters to their names.

6. The maximum number of marks obtainable in each practical subject is 150, of which 100 entitles to a Pass and 130 to Distinction.

7. The maximum number of marks obtainable in each theoretical paper is 150, of which 100 entitles to a Pass and 130 to Distinction.

8. No special textbooks are prescribed for theoretical examinations, and no particular method or style is specified for practical examinations. No particular edition is prescribed for pieces found in the syllabus, but for the convenience of teachers and candidates the University publishes, in separate books for each grade, the studies and pieces required for the Pianoforte Examinations, which can be obtained direct from the General Secretary or from the various local music dealers.

9. Candidates presenting a study or piece not prescribed by the current syllabus, run a risk of being disqualified.

10. Candidates entering for practical subjects must, in all grades except the two last (Elementary and Lowest), previously work a theory paper of the preceding lower grade during the same year or the preceding year.

11. Only one candidate at a time is allowed to be in the examination room for practical examinations.

12. The accompanist for all examinations, where one is needed, is allowed to be in the examination room, only to accompany the songs and pieces.

13. The examiner's decision is final, and cannot be reconsidered.

14. The possession of certain certificates granted by other institutions may exempt the holder from the necessity of taking the Theoretical part of the Local Examinations. In making application for exemption the holder of such certificate must give explicit information to the General Secretary at least one month before the date of the examination, and be prepared to produce the original certificate if required.

15. The possession of certain certificates gained in the Local Examinations will entitle the holders to claim exemption from certain parts of the examinations for the Diploma of Licentiate in Music, should they at a later date decide to proceed to the higher examinations for that Diploma.

LOCAL CENTRES.

The following places have been at present adopted as centres for public examinations in Music; others will be added as necessity requires, but in all cases the establishment of a centre depends upon a sufficient number of candidates applying. All examinations for Certificates in the Local Grades, as well as some of those for Degrees and Diplomas, will be held at these centres:

Victoria.....Representative: Principal of the High School.
Secretary: Dr. J. E. Watson, 1002 Fort St.

Vancouver.....Representative: G. E. Robinson, Esq., B.A., British Columbia University.
Secretary: Frederick Chubb, Esq. M.A., Mus. Bac.

Revelstoke.....Representative: Rev. C. A. Procunier, The Rectory.

Penticton.....Representative: Rev. Canon G. Thompson.
Secretary: Mrs. D. Hislop.

Cranbrook.....Secretary: G. E. Bower, Esq. Box 488

Vernon.....Representative: Howard De Beck, Esq.
Secretary: Miss Bertha Dillon, L.Mus., "Chez Nous."

Fernie.....Secretary: Miss S. E. West.

Nelson.....Representative: H. E. Dill, Esq., 418 Mill St.
Secretary: Miss Olive Campbell, L. Mus.

Calgary.....Representative: A. Calhoun, Esq., City Librarian, Public Library.
Secretary: G. D. Van Stockum, Esq., 322a 8th Ave. West.

Edmonton.....Representative: Rev. N. D. Keith.

Wetaskiwin.....Representative: Rev. Mr. Pocock.

Lethbridge and Macleod..Representative: W. A. Buchanan, Esq., M.P.

Medicine Hat.....Representative: W. E. Hay, Esq., Superintendent of Schools.

Moose Jaw.....Representative: Rev. Angus A. Graham, B.A., Principal of Moose Jaw College.
Secretary: Miss Esmè Rose, 523 Hochelaga Street West.

Saskatoon.....Representative: Rev. Canon Smith.
Secretary: Geo. C. Palmer, Esq.

Wolseley.....Representative:
Secretary: Mrs. Allan P. Thomson.

Indian Head.....Representative: Rev. J. Smith-Windsor.
Secretary: Cecil C. Halleran, Esq., L.Mus.

Regina.....Representative: President of Regina College.
Secretary: F. G. Killmaster, Esq.

Fort Qu'Appelle.....Representative: W. M. Thompson, Esq.

Brandon.....Representative: Principal of Brandon Collegiate Institute.

Macgregor.....Representative: Rev. J. R. Johns.

Winnipeg .....Representative:
Secretary: A. H. Egerton, Esq., Mus. Bac.

Gladstone.....Secretary: David B. McHardy, Esq.

Pembroke.....Secretary:

Renfrew.....Secretary: Percival Kirby, Esq., Mus. Bac.

Peterboro.....Representative: Rev. J. A. McKenzie, 274 Sherbrooke Street.

Ottawa.....Representative: Rev. Geo. P. Woolcombe, M.A., Oxon.
Secretary: Dr. Herbert Sanders.

Smith's Falls.....Secretary: Ernest O'Dell, Esq.

Brockville	Representative: J. A. Hutcheson, Esq., K.C. Secretary: James Makepeace, Esq.
Sherbrooke	Secretary: A. Roy Kendall, Esq., 156 London St.
Cornwall	Representative: Rev. J. R. Baldwin.
Maxville	Secretary: Miss Netta McEwen.
Three Rivers	Representative: Rev. J. R. MacLeod, B.A.
Granby	Secretary: W. Smithson, Esq., Mus. Bac.
Quebec	Representative: Dr. G. W. Parmalee, Parliament Buildings. Secretary: H. Gordon Perry, Esq., 19 Fraser Street.
St. John	Representative: Rev. J. H. A. Holmes, St. Jude's Rectory. Secretary: J. S. Ford, Esq., 27 Dorchester St.
Rothesay	Representative: Rev. A. W. Daniels, The Rectory. Secretary: Miss A. Davidson, L. Mus.
Woodstock	Secretary: Miss M. Lindsay.
Fredericton	Representative: Dr. H. B. Bridges, Principal of the Normal School.
Moncton	Representative: Secretary: Geo. Ross, Esq., Mus. Bac.
Halifax	Representative: Rev. W. J. Patton. Secretary: Miss Ada Hoyt, 3 College Street.
Truro	Representative: David Soloan, Esq., Ph.D. Secretary: H. A. Wellard, Esq.
New Glasgow	Secretary: R. G. Humphreys, Esq.
Stellarton	Secretary: L. N. Miller, Esq., L. Mus.
Sydney	Secretary: J. B. Neild, Esq.
Glace Bay	Representative: Rev. H. Watson.
Amherst	Representative: Rev. E. H. Ramsay.
Campbellton	Representative: Judge F. F. Matheson.

FEES FOR LOCAL EXAMINATION

1.—Theory of Music.

	Fee
Highest Grade	$9.00
Senior Grade	5.50
Intermediate Grade	4.00
Junior Grade	3.00
Elementary Grade	2.00

2.—Practical Subjects.

Highest Grade, including fee for Theory work	$12.00
Senior Grade, including fee for Theory work	10.00
Intermediate Grade, including fee for Theory work	7.50
Junior Grade, including fee for Theory work	6.00
Elementary Grade	3.50
Lowest Grade	2.50

3.—Supplementary Theoretical Examinations.

Fee for the three highest grades	$2.00
Fee for the two lowest grades	1.50

4 —General School Examination.

Fee $20.00 for first hour and $10.00 for each succeeding hour. (One examiner.)

5.—Class Singing Examination.

Fee, $10.00 per class. (One examiner.)

For details of the work prescribed for Local Centre Examinations see Special Announcement of the Conservatorium of Music.

LECTURE TIME TABLE IN MUSIC

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9 to 10			Harmony Final Mus. Bac.			History 3rd Year Harmony Intermediate Grade
10 to 11			Counterpoint Final Mus. Bac.	Harmony 2nd Mus. Bac.		Harmony Highest Grade Harmony Intermediate Grade Higher Theory for Junior Grade
11 to 12		History of Music 1st Year	Final Mus. Bac. Orchestration	2nd Mus. Bac. Counterpoint	History of Music 2nd Year	Elocution and Diction Senior Harmony Elementary Theory
12 to 1			Transposition and Modulation	2nd Mus. Bac. Canon & Fugue		Counterpoint Highest Grade. Sight Singing
2 to 3		1st Mus. Bac. Harmony	Transposition			
3 to 4		1st Mus. Bac. Counterpoint	Higher Theory for Junior Grade			
4 to 5		Acoustics. Senior Harmony	Harmony for Intermediate Grade	Higher Theory for Junior Grade		
7 to 8			Theory and Sight Singing			
8 to 10		Orchestral Class				

FACULTY OF GRADUATE STUDIES AND RESEARCH.

GENERAL STATEMENT.

The Faculty of Graduate Studies and Research directs and controls all the courses leading to the higher degrees and recommends candidates for these degrees.

The members of the Faculty are the heads of departments and certain others on the staff of the University who offer and give *bona fide* courses of instruction of a graduate character and who superintend research work for the higher degrees. The members are appointed by the Board of Governors on the recommendation of the Principal. Other members of the staff, not members of the Faculty, who give graduate work of an approved character, have the rank of Associates of the Faculty.

The functions of the Faculty are *inter alia*:—

(1) To approve of the courses submitted by the heads of departments giving graduate instruction.

(2) To determine the conditions under which students may become candidates for higher degrees.

(3) To conduct examinations for such degrees.

The routine executive work of the Faculty, such as the admission and registration of students, the determination of the courses which they must take, the approval of the students' fulfilment of the requirements and the arrangements for the examinations are in charge of an Executive Committee appointed by the Faculty, which at stated intervals reports its proceedings to the Faculty as a whole.

ADMISSION.

Advanced courses of instruction are offered to students who are graduates of any university of recognized standing. Admission to these advanced courses does not in itself imply candidacy for a higher degree.

REGISTRATION.

Application for registration as a graduate student should be made to the Dean of the Faculty of Graduate Studies and Research. The application should be made on a special printed form which may be obtained upon application at the Dean's Office. This, when filled out, will give the necessary information with reference to the degrees held by the candidate, the courses of undergraduate study which he has followed, and the courses of graduate study which he desires to pursue. All applications for courses of graduate study must be filed with the Dean of this Faculty before October 10th of each year. Candidates whose course extends over more than one year must register at the commencement of each year of their course. As soon as the candidate's course has been approved by the Faculty, he must register without delay at the office of the University Registrar. He will not be given credit for attendance until he does so.

DEGREES.

Graduate students may proceed to one or other of the following degrees:—Master of Arts, Master of Laws, Master of Science, Master of Science in Agriculture, Doctor of Philosophy, Doctor of Literature, Doctor of Science, Doctor of Music.

COURSES AT MACDONALD COLLEGE.

Postgraduate students who are taking the major part of their work at Macdonald College, may go into residence there and can take, when required, other postgraduate courses given at the University.

FELLOWSHIPS, SCHOLARSHIPS AND MEDALS.

THE GOVERNOR-GENERAL'S SILVER MEDAL (the gift of his Excellency Baron Byng of Vimy) will be awarded for graduate research work in science.

The following three graduate Fellowships are awarded annually in the Department of Economics and Political Science.

THE ALLEN OLIVER FELLOWSHIP, tenable at McGill University or elsewhere, as sanctioned by the department; $500 for one year.

THE MONTREAL MANUFACTURERS GRADUATE FELLOWSHIP; $800 for one year. The holder of this fellowship must devote himself especially to a subject connected with the trade and industry of Canada.

THE GRADUATE (WORKING) FELLOWSHIP; $800 a year. The holder of this fellowship is required to devote one third of his time to the work of the University in the correction of junior exercises, etc.

The following Scholarships are tenable at Macdonald College:—

MACDONALD COLLEGE AGRICULTURAL ALUMNI ASSOCIATION GRADUATE SCHOLARSHIP:—In memory of graduates and undergraduates of the Faculty of Agriculture who died in service during the Great War, 1914-1918; created, in connection with the McGill Centennial Campaign, 1920, through subscriptions of graduates, undergraduates, members of the staff of instructors and other friends; of a present value of about $200.00 and available to any graduate in Agriculture of Macdonald College (McGill University) for postgraduate work, in any branch pertaining to agriculture at any college or university of recognized standing. The holder of this scholarship shall be chosen by a committee appointed by the executive of the Macdonald College Agricultural Alumni Association, and applications for the same, or for further information regarding it, should be addressed to:—Mr. J. Egbert McOuat, B.S.A., General Secretary, Macdonald College, P.Q.

MACDONALD GRADUATE SCHOLARSHIPS. The W. C. Macdonald Reg'd. have offered ten scholarships, two to the Province of Quebec and one to each of the other provinces of the Dominion, valued at $500.00 each for the academic year, tenable at Macdonald College. The Province of Quebec scholarships are offered: one to the graduates of the University of Montreal (the Agricultural Institute, Oka) and one to the graduates of Laval University (the Agricultural School of Ste. Anne de la Pocatière). If these scholarships are not taken up by the first of July immediately preceding the academic year, they are to be at the disposal of Macdonald College. Applications should be made through the Head of the Faculty of Agriculture or Agricultural College of the province concerned, to the Principal, Macdonald College, P.Q.

QUEBEC MINISTER OF AGRICULTURE GRADUATE SCHOLARSHIPS. The Minister of Agriculture of the Province of Quebec has granted three scholarships for the session of 1923-24; one each to graduates of the Oka Agricultural Institute (University of Montreal), the School of Agriculture, Ste. Anne de la Pocatière (Laval University), and the School of Agriculture, Macdonald College (McGill University); of the value of $500.00 each, for graduate work at Macdonald College; on the understanding that the holders of such scholarships are residents of the Province of Quebec and that such scholarships shall be awarded by the Minister, upon the recommendation of the three Schools of Agriculture concerned.

THE MILTON L. HERSEY SCHOLARSHIP, having a value of four hundred dollars, is open to any graduate. Preference will be given to applications from students who desire to work on the application of practical chemistry to agriculture.

WOMEN STUDENTS.

Women Students registering in this Faculty are invited to call at the Royal Victoria College for information concerning the following:—

1. The Alumnae Society of McGill University, for membership in which they are eligible.

2. The Monteregian Club, a Residential Club for women engaged in educational work, for membership in which they are eligible.

They can also obtain from the Secretary of the Royal Victoria College the addresses of boarding houses in Montreal, and they may, if they wish, make arrangements to obtain luncheon in the College.

REGULATIONS FOR THE DEGREE OF MASTER OF ARTS (M.A.).

Instruction in the Faculty of Graduate Studies and Research leading to the degree of Master of Arts is provided in the following departments of study which rank as "Subjects":—

Greek Language and Literature.
Latin Language and Literature.
Romance Languages and Literatures.
Germanic Language and Literature.
English Language and Literature.
Oriental Languages.
International Law.
Constitutional Law.
Philosophy, including Psychology.
History.
Economics and Political Science.
Mathematics.

The requirements for the degree are as follows:—

(1) Candidates must hold the degree of B.A. or B.Sc. (in Arts) from McGill University, or its equivalent.

(2) Candidates must take at least one year of resident graduate study at McGill University.

(3) One or two subjects may be taken.

(4) When two subjects are taken one of them shall be designated as the major subject and special attention shall be paid to it. It must be a subject which the candidate has already studied in his undergraduate course, and the work required in it will represent an attainment in knowledge far in advance of that required for the B.A. degree. The minor subject, if taken, must be a cognate subject and be approved by the head of

the major department. Not more than one-third of the candidate's time for the year shall be devoted to the minor. The course of study selected by the student must receive the approval in writing of the heads of the departments concerned and also of the Faculty of Graduate Studies and Research. The candidate shall pass an examination in each of the subjects in his course.

(5) The candidate shall also present a thesis on some topic connected with his major subject. The title of his thesis must have been previously submitted to the head of the department concerned and to the Faculty of Graduate Studies and Research for their approval in writing. The thesis must be in some measure a contribution to knowledge and must also be in good literary style.

(6) The thesis must be in the hands of the Dean of the Faculty of Graduate Studies and Research on or before April 15th, if the candidate wishes to present himself for the degree at the convocation in May.

(7) The first year's course of study for the Ph.D. degree may cover the requirements of the M.A. course; but if such a course of study be followed, a thesis must be submitted and approved before the degree of M.A. is conferred. If, however, the candidate continues his course of study and takes the degree of Ph.D., the degree of M.A. will be conferred with the degree of Ph.D., and in this case no special thesis will be required for the former.

REGULATIONS FOR THE DEGREE OF MASTER OF LAWS (LL.M).

Instruction in the Faculty of Graduate Studies and Research leading to the degree of Master of Laws is provided in the several departments of Law.

The requirements for this degree are as follows:—

(1) Candidates must hold the degree of B.C.L. or LL.B. from McGill University, or its equivalent, or be graduates of an approved law school.

(2) They must pursue one year of resident graduate study at McGill University.

(3) They shall also present a thesis on some subject previously approved by the head of the department concerned and the Faculty of Graduate Studies and Research. The thesis must be in some measure a contribution to knowledge and must also be written in good literary style.

The thesis must be in the hands of the Dean of the Faculty of Graduate Studies and Research on or before April 15th, if the candidate wishes to present himself for the degree at the convocation in May.

REGULATIONS FOR THE DEGREE OF MASTER OF SCIENCE (M.Sc.)

Instruction in the Faculty of Graduate Studies and Research leading to the degree of Master of Science is provided in the following departments of study which rank as "Subjects":—

Mathematics.
Physics.
Engineering Physics.
Chemistry.
Biochemistry.
Botany.
Plant Pathology.
Zoology.
Entomology.
Anatomy.
Pathology.
Bacteriology.
Physiology.
Pharmacology.
Geology and Mineralogy.
Geodesy.
Thermodynamics and Theory of Heat Engines.
Theory of Elasticity, Strength of Materials and Theory of Structures.
Hydrodynamics and Hydraulics.
Applied Electricity.
Theory of Machines and Machine Design.
Metallurgy.
Mining.
Ore Dressing.

The requirements for the degree are as follows:—

(1) Candidates must hold the degree of B.A. or B.Sc. from McGill University, or its equivalent.

(2) Candidates must take at least one year of resident graduate study at McGill University.

(3) The course of study followed by the candidate shall be of an advanced character, being the equivalent of that required for the degree of M.A. and shall lie in the domain of pure or applied science. It may be selected from any one or (at the discretion of the head of the department in which the major subject is) two subjects included in the list given above. This course of study, which must be of a comprehensive character, must have been previously submitted to the head of the department and to the Faculty of Graduate Studies and Research and have received their approval in writing.

(4) The candidate shall also present a thesis on some subject connected with his course of study. The title of the thesis must have been previously submitted to the head of the department and to the Faculty of Graduate Studies and Research and have received their approval in writing. The thesis must be in some measure a contribution to knowledge and must also be written in good literary style.

(5) The first year's course of study for the Ph.D. degree may cover the requirements of the M.Sc. course; but if such a course of study be followed a thesis must be submitted and approved before the degree of M.Sc. is conferred. If, however, the candidate continues his course of study and takes the degree of Ph.D., the degree of M.Sc. will be conferred with the degree of Ph.D., and in this case no special thesis will be required for the former.

(6) The thesis must be in the hands of the Dean of the Faculty of Graduate Studies and Research on or before April 15th, if the candidate wishes to present himself for the degree at the Convocation in May, except in the case of theses involving experimental work, when the time will be extended to May 15th. No thesis received after these dates will be accepted.

REGULATIONS FOR THE DEGREE OF MASTER OF SCIENCE IN AGRICULTURE (M.S.A.).

The following constitute major subjects for this degree:—

Agronomy.
Poultry Husbandry.

The requirements for the degree are as follows:—

(1) Candidates must hold the degree of B.S.A. from McGill University or its equivalent.

(2) Candidates must take one year of resident graduate study at Macdonald College, Faculty of Agriculture, McGill University.

(3) One or two subjects may be taken.

(4) When two subjects are taken, one of them shall be designated as the major subject and special attention shall be paid to it. It must be a subject which the candidate has already studied in his undergraduate course, and the work required in it will represent an attainment in knowledge far in advance of that required for the B.S.A. degree. Not more than one-third of the candidate's time for the year shall be devoted to the minor subject. The candidate shall pass an examination in each of the subjects of his course.

(5) The course of study selected by the student must receive the approval, in writing, of the heads of the departments concerned and also of the Faculty of Graduate Studies and Research.

(6) The candidate shall also present a thesis on some topic connected with his major subject. The title of his thesis must have been previously submitted to the Faculty of Graduate Studies and Research and the head of the department concerned, and have received their approval in writing. The thesis must be a contribution to knowledge and must also be written in good literary style.

The thesis must be in the hands of the Dean of Graduate Studies and Research on or before May 15th, if the candidate wishes to present himself for the degree at the Convocation in May.

(7) Candidates for the M.S.A. degree who select agronomy may register in September or January. In the latter case they will be expected to remain in residence until the end of September. This gives an opportunity for practical field, laboratory and thesis work during the crop-growing season.

REGULATIONS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY (Ph.D.).

(1) Candidates for the degree of Doctor of Philosophy must hold the degree of B.A. or B.Sc. or M.D. from McGill University, or its equivalent.

(2) They must follow a course of at least three years resident graduate study. Of these at least one must be at McGill University. The other two may be spent at institutions approved by the Faculty of Graduate Studies.

(3) They must select one major subject and one or two minor subjects. The minor subjects or subject must be cognate to the major subject and must be approved by the head of the department in which the major is. Not more than one-quarter of their time shall be devoted to the minor or minors.

Courses leading to the degree of Doctor of Philosophy are offered in the following as major subjects:—

Bacteriology.
Botany.
Biochemistry.
Chemistry.
Geology and Mineralogy
Pharmacology.
Physics.
Physiology.
Oriental Languages.

In special cases heads of departments may be able to provide courses in other subjects which will lead to this degree. Candidates, therefore, desiring to proceed to the degree of Doctor of Philosophy in other departments than those mentioned above should make direct application to the Faculty of Graduate Studies and Research, asking whether courses in such subjects can be provided.

(4) The course of study which the candidate desires to follow must, before he enters upon it, have been submitted to the heads of the several departments concerned and to the Faculty of Graduate Studies and Research and have received their written approval.

(5) Before the termination of the second year every candidate must satisfy the Faculty of Graduate Studies and Research that he has a reading knowledge of both French and German.

(6) The examinations shall be both written and oral. On the major subject, they shall cover not merely the formal courses of instruction which have been taken, but the candidate must show that he possesses a good general knowledge of the whole science or branch of learning which he has selected as his major subject. A similar general, though less detailed, knowledge shall be required in the case of the minor subjects.

(7) The candidate must also prepare a thesis which shall display original scholarship and be a distinct contribution to knowledge. The subject of this thesis must have been approved, in writing, by the head of the department in which the major subject lies and also by the Faculty of Graduate Studies and Research, at least twelve months before the date of the final examination. If the candidate wishes to present himself for the degree at the convocation in May, this thesis must be in the hands of the Dean of the Faculty of Graduate Studies and Research on or before April 15, except in the case of theses involving experimental work, when the time will be extended to May 15. No thesis received after these dates will be accepted. This thesis must have been examined and approved before the candidate can proceed to his examination.

One week before the Convocation at which the degree is to be conferred, a type-written copy of the thesis, accompanied by a statement from the head of the department that the copy in the form submitted has been accepted, shall be filed in the office of the Dean of the Faculty of Graduate Studies and Research. This copy must be left there till one hundred printed copies have been deposited in the Library.

The candidate shall at the same time deliver to the Dean of the Faculty of Graduate Studies and Research a legal contract that he will furnish the Library with one hundred printed copies by a specified date. The publication furnished by him must be a separate print, containing only the thesis. Its size, cover, and title page must conform to the requirements given on page 22.

Upon recommendation of a department and the approval of the Faculty of Graduate Studies and Research a briefer form of the thesis than that approved for the degree may be accepted in fulfilment of the publication requirement. This shall contain an account of the method followed in the investigation, an abstract of the evidence adduced and a full summary of the results obtained. Those who adopt this plan must, in addition to the hundred printed copies of the short form of the thesis, deposit in the Library two type-written copies of the complete thesis.

REGULATIONS FOR THE DEGREE OF DOCTOR OF CIVIL LAW (D.C.L.).

Any person who has graduated as B.C.L. or as LL.M. from McGill University may after seven years from such graduation proceed to the degree of Doctor of Civil Law, provided he has distinguished himself by eminent services in the domain of law, and provided he has written a thesis on a subject previously approved by the Faculty of Graduate Studies and Research, and that such thesis has been adjudged by that Faculty to be a valuable contribution to legal science. The candidate may, instead of a thesis, submit a published book or books dealing in a scientific way with some branch or branches of law.

REGULATIONS FOR THE DEGREE OF DOCTOR OF LITERATURE (D.Litt.).

Bachelors of Arts of McGill University who are graduates of at least seven years standing, and who have distinguished themselves by special research and learning in the domain of arts and literature, may submit their published works to the Faculty of Graduate Studies and Research and apply for the degree of Doctor of Literature. A very high standard is required for this degree, but it does not call for any resident graduate study at the University. Graduates of other universities are not eligible for this degree.

REGULATIONS FOR THE DEGREE OF DOCTOR OF SCIENCE (D.Sc.)

Bachelors of Arts, Bachelors of Science or Doctors of Medicine of McGill University, who are graduates in one or other of these Faculties of at least seven years standing, and who have distinguished themselves by special research and learning in the domain of science, may submit their published works to the Faculty of Graduate Studies and Research and apply for the degree of Doctor of Science. A very high standard is required for this degree, but it does not call for any resident graduate study at the University. Graduates of other universities are not eligible for this degree.

REGULATIONS FOR THE DEGREE OF DOCTOR OF MUSIC (Mus. Doc.).

Bachelors of Music of McGill University, after the lapse of a period of seven years from the time of taking that degree, may proceed to the degree of Doctor of Music, the requirement for which is a composition in extended

form, such as an oratorio, opera or cantata. This exercise must have as its first number an introductory orchestral movement in the usual concert overture form, and must contain eight-part writing and fugal treatment. It must be scored for a full orchestra. If preferred, a candidate may present a composition scored for orchestra in the form of a symphony, symphonic poem or tone poem, occupying not less than forty minutes in performance. In addition, an examination in the higher forms of composition shall be necessary, together with a critical knowledge of the full scores or certain prescribed works. This degree is open only to graduates of the Faculty of Music of McGill University.

REGULATIONS CONCERNING THESES.

Owing to the fact that all theses submitted by successful candidates for higher degrees will be bound and placed in the Library, candidates for such degrees are advised that the Faculty of Graduate Studies and Research will henceforth require these to be prepared in a uniform manner and in accordance with the following specifications:—

(1) The paper is to be of uniform size, 8½ x 11 inches, and of substantial quality.

(2) The left-hand margin is to have a uniform width of about 1½ inches. Drawings larger than the prescribed page should be folded in the manner most suitable for binding.

(3) All theses must be type-written and **in duplicate.**

(4) No binding is to be employed, but the loose sheets must be placed in a manilla envelope in the order of their pagination.

In the case of candidates presenting themselves for the degree of Doctor of Science, Doctor of Literature or Doctor of Civil Law, **two copies** of the book or books—or for the degree of Doctor of Civil Law, should a thesis be substituted, two type-written copies of the thesis—must be submitted to the Dean of the Faculty of Graduate Studies and Research not later than February 15th of the year in which the candidate desires to take the degree.

COURSES OF GRADUATE STUDY.

DEPARTMENT OF CLASSICS.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

————————, Professor of Classics.

ASSOCIATE OF THE FACULTY.

SAMUEL B. SLACK, Professor of Greek.

COURSES FOR THE DEGREE OF MASTER OF ARTS.

Greek 1*: Homer, Iliad, VII, VIII; Aristotle, Ethics I, II (Oxford Classical Text); Theophrastus, Characters (Oxford Classical Text); Translation at sight (Fox and Bromley, Oxford University Press).
3 hours, Tu., Th., Sat., at 11.....Professor Slack.

Latin 1*: Juvenal, I, III, V, VII, VIII, X (Wilson, D.C. Heath); Suetonius, Tiberius and Nero (Pike's Suetonius, Selected Lives, Allyn and Bacon, Boston); Lectures on the Private Life of the Romans (illustrated).
3 hours. Mon., Wed., Fri. at 9.....Professor ————

Latin 2: The Religion of the Romans. Colloquium. Sat., 9-11.
Professor ————

DEPARTMENT OF ORIENTAL LANGUAGES AND LITERATURE.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

C. A. BRODIE BROCKWELL:—*Professor of Hebrew and Semitic Languages, Law and History.*

ASSOCIATES OF THE FACULTY.

ALEXANDER R. GORDON:—*Professor of Hebrew.*

GEORGE ABBOTT-SMITH:—*Assistant Professor of Jewish Hellenistic Literature.*

COURSES FOR THE DEGREE OF MASTER OR ARTS.

1. **Special Texts:** connected with Hebrew, or Aramaic, or Syriac, or Phoenician and Punic, or Arabic, or Ethiopic, according to the nature of the thesis.
   3 hrs.....Professor Gordon, Assistant Professor Abbott-Smith, or Mr. Graham.

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*Open also to undergraduates in the honour courses of the Third and Fourth Years.

2. **Synopsis of Semitic History.**
1 hr.....Professor Gordon

*3. **Semitic Comparative Philology.**
1 hr.....Professor Brockwell

*4 **Semitic Epigraphy:** including a knowledge of the history of the Semitic alphabet.
1 hr.....Professor Brockwell.

*5. **Hebrew and Semitic Social Customs, Institutions and Codes.**
3 hrs.....Professor Brockwell

6. **The Arithmetical Processes implied in the Grammar and Syntax of the Hebrew and Semitic Numerals.**
1 hr.....Professor Brockwell.
Or the following can be substituted for any two of the courses 2, 3, 4, 6.

7. **Hellenistic Grammar, Syntax and Lexicography.**
1 hr.....Assistant Professor Abbott-Smith.

8. **The Critical Use and Values of Hellenistic Documents.**
1 hr.....Assistant Professor Abbott-Smith.

N.B.—Each of these eight courses consists of lectures.

COURSE FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

This will be arranged on application to the Faculty.

DEPARTMENT OF ENGLISH.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

PAUL T. LAFLEUR:—*Professor of English and Comparative Literature.*

ASSOCIATES OF THE FACULTY.

CYRUS MACMILLAN:—*Associate Professor of English.*
GEORGE W. LATHAM:—*Associate Professor of English.*

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*Courses marked with an asterisk are undergraduate honour courses in the Faculty of Arts which may also be followed by graduate students who have not already taken them.

COURSES FOR THE DEGREE OF MASTER OF ARTS.

1. **Anglo-Saxon.**
Beowulf.
2 hrs. ..... Associate Professor Latham.

2. **The English and Scottish Popular Ballads,** with some attention to Canadian Folk-songs and Folk-tales and their relation to those of Europe.
2 hrs. ..... Associate Professor Macmillan.

3. **Comparative Literature.**
Epistolary Literature.
2 hrs. ..... Professor Lafleur.

4. **Comparative Literature.**
Memoirs and Memoir-Writers, beginning with Philippe de Commine
2 hrs. ..... Professor Lafleur.

5. **Chaucer.** Prerequisite:—15.
2 hrs. ..... Associate Professor Latham.

6. **The Drama in England from 1660 to 1920.**
2 hrs. ..... Associate Professor Macmillan.

7. **Methods of Literary Criticism.**
2 hrs. ..... Professor Lafleur.

*8. **Spenser and Milton.**
3 hrs. in first term; Mon., Wed., Fri., at 9. Associate Professor Latham.

*9. **Shakespere (Six Plays).**
3 hrs.; Mon., Wed., Fri., at 10. ..... Associate Professor Macmillan.

*10. **Poets of the Nineteenth Century.**
3 hrs.; Mon., Wed., Fri., at 4. .... Professor Lafleur and an Assistant.

*11. **English Novelists, from Defoe to George Eliot.**
3 hrs.; Mon., Wed., Fri., at 11. ..... Professor Lafleur.

*12. **The English Drama, 1590-1642.**
3 hrs.; Tu., Th., Sat., at 11. ..... Associate Professor Macmillan.
(Given in 1922-23; omitted in 1923-24.)

*13. **Anglo-Saxon.**
3 hrs., 1st term; Mon., Wed., Fri., at 2. .... Associate Professor Latham.
Text-book:—Sweet, Anglo-Saxon Reader (all the prose).

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*Courses marked with an asterisk are undergraduate honour courses in the Faculty of Arts which may also be followed by graduate students who have not already taken them.

*14. **Anglo-Saxon Poetry and Introduction to English Philology.**
3 hrs., 2nd term; Mon., Wed., Fri., at 2. . Associate Professor Latham.
Text-book:—Sweet, Anglo-Saxon Reader (all the verse).
Prerequisite:—13.

*15 **Chaucer.**
3 hrs. in second term; Mon., Wed., Fri., at 9.....
Associate Professor Latham.

*16. **Comparative Literature.**
(The influence of English literature upon the continent of Europe, chiefly during the 18th and 19th centuries.)
3 hrs.; Tu., Th., Sat., at 10.....Professor Lafleur.
(Omitted in 1922-23).

*17. **Comparative Literature.**
(The literary relations between England and the continent of Europe, through the works of leading French, German, Spanish and Italian writers, beginning with Montaigne.)
3 hrs.; Tu., Th., Sat., at 10.....Professor Lafleur.

Candidates for the degree of M.A., taking English as their only subject, must select four courses, of which two must be from Nos. 1 to 7 (inclusive), while No. 13, or its equivalent, is compulsory.

DEPARTMENT OF ROMANCE LANGUAGES.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

RENE DU ROURE:— *Professor of French.*

ASSOCIATE OF THE FACULTY.

LUCIE TOUREN:—*Assistant Professor of French.*

COURSES FOR THE DEGREE OF MASTER OF ARTS.

1. **Comparative Literature** (Department of English, Course 17.)
3 hrs.....Professor Lafleur.

2. **Versification:** histoire et technique.
1 hr.....Associate Professor du Roure.

3. **Histoire de la langue française.**
1 hr.....Associate Professor du Roure.

4. **Histoire de la Comédie en France.**
2 hrs.....Assistant Professor Touren.

5. **Exercices pratiques.** (colloquia)
1 hr.....

*6. **Histoire du roman en France.**
3 hrs. (Given in 1925-26).....Associate Professor du Roure.

*7. **Histoire du Théâtre en France.**
2 hrs. (Given in 1923-24).....Associate Professor du Roure.

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*Courses marked with an asterisk are undergraduate honour courses in the Faculty of Arts which may also be followed by graduate students who have not already taken them.

*8. **Histoire de la poésie lyrique en France.**
2 hrs. (Given in 1924-25) ....Associate Professor du Roure.

Candidates for the Master's degree in French only will take courses 1 to 5 inclusive, and also one of 6, 7, 8.

Those taking French as a major will omit 1 and either 2 or 3.

Those taking French as a minor will take 4 and one of the one-hour courses.

Those who have not taken French Philology in their undergraduate course must take it as a part of their M.A. course, except when French is taken as a minor.

DEPARTMENT OF GERMANIC LANGUAGES AND LITERATURES.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

H. WALTER:—*Professor of Germanic Languages and Literatures.*

COURSES FOR THE DEGREE OF MASTER OF ARTS.

1. **Comparative Literature** (Department of English—No. 17.)
Professor Lafleur.

2. **Goethe.**
2 hrs.....Professor Walter.

3. **Geschichte des deutschen Romans.**
2 hrs.....Professor Walter.

4. **Grillparzers Dramen.**
1 hr.....Professor Walter.

5. **Gothic and Introduction to Germanic Philology**
1 hr.....Professor Latham.

6. **Praktische Ubungen.**
1 hr.....Professor Walter

Candidates taking Germanics only will take courses 1 to 4 and either 5 or 6; those taking Germanics as a major will omit 1, 4 and 5; those taking Germanics as a minor will take 2 or 3 in addition to one of the one-hour courses.

Candidates who have not taken German Philology and Mediaeval Texts in their undergraduate course must take it as part of their M.A. course, except when German is taken as a minor.

DEPARTMENT OF HISTORY.

MEMBERS OF THE FACULTY OF GRADUATE STUDIES.

BASIL WILLIAMS:—*Professor of History.*
CHARLES EDMUND FRYER:—*Professor of History.*

ASSOCIATES OF THE FACULTY

W. T. WAUGH:—*Associate Professor of History.*

COURSES FOR THE DEGREE OF MASTER OF ARTS

*1. **European Expansion and Colonization.**
Lectures, 3 hrs. ..... Professor Williams.

2. **Reformation Period.**
Seminar, 1 hr. ..... Professor Waugh.

3. **Historical Methods and Criticism**
Seminar, 1 hr. ..... Professor Williams. / Professor Freyer. / Professor Waugh.

*4. **Age of Chaucer and Wycliffe.**
Seminar, 1 hr. ..... Professor Waugh.

*5. **The Treaty of Vienna.**
Seminar, 1 hr. ..... Professor Fryer.

*6. **The Anglo-French Entente of 1904.**
Seminar, 1 hr. ..... Professor Williams.

*7. **Federal Constitution of the British Empire.**
Seminar, 1 hr. ..... Professor Williams.

DEPARTMENT OF PHILOSOPHY.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

WILLIAM CALDWELL:—*Professor of Moral Philosophy.*

ASSOCIATE OF THE FACULTY.

J. W. A. HICKSON:—*Professor of Logic and Metaphysics.*
WILLIAM D. TAIT:—*Associate Professor of Psychology and Director of the Psychological Laboratory.*

COURSES FOR THE DEGREE OF MASTER OF ARTS.

*1. **The Critical Philosophy of Kant.**
Lectures, Readings and Papers.
3 hours. ..... Professor Caldwell or Associate Professor Hickson.

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*These courses are also open to undergraduate students reading for honours in History in the Faculty of Arts.

*2. **Advanced Psychology.**
Lectures, prescribed readings and a thesis.
3 hours, given in 1924-25.....Associate Professor Tait.

3. **Ethical Seminary.**
Recent and Contemporary Ethical Theories.
3 hours.....Professor Caldwell.

4. **Philosophical Seminary** on cosmological problems of the present time. 3 hours.....Associate Professor Hickson.

5. **Psychological Laboratory.**
Experimental Investigations in Human Psychology.
Double Course.....Associate Professor Tait and Mr. DeSilva.

6. **Seminary in Psychology.**
Problems in Psychology. Prescribed readings and reports.
3 hours.....Associate Professor Tait.

DEPARTMENT OF ECONOMICS AND POLITICAL SCIENCE.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

STEPHEN LEACOCK:—*Professor of Political Economy.*

ASSOCIATE OF THE FACULTY.

JOSEPH CLARENCE HEMMEON:—*Associate Professor of Economics and Political Science.*

COURSES FOR THE DEGREE OF MASTER OF ARTS.

*1. **Social and Industrial Legislation.**
3 hours.....Assistant Professor ——

2. **Great Britain: Economic and Fiscal Problems.**
3 hours.....Assistant Professor ————————

3. **Provincial and Municipal Finance in Canada.**
3 hours in 1st term.....Associate Professor Hemmeon.

4. **Economic Debates of the Parliament of Canada.**
3 hours in 2nd term.....Professor Leacock.

5. **Graduate Seminar.**
(Conferences with individual students). 1 hour.

The work in the Department is carried on with especial reference to the study of the economic and political problems of Canada.

No students are admitted except those who have taken an honour B.A. degree in the department or who have completed elsewhere a course accepted by the department as equivalent to that standing.

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*These are also honour courses in the Faculty of Arts.

Each graduate student in addition to his thesis and seminar work is required to attend six hours of lectures per week.

Three Graduate Fellowships are offered in this Department. (See page 12).

LAW.

MEMBERS OF THE FACULTY OF GRADUATE STUDIES.

HERBERT ARTHUR SMITH:—*Professor of Jurisprudence and Common Law.*
IRA ALLAN MACKAY:—*Professor of Constitutional Law.*

COURSES FOR THE DEGREE OF MASTER OF ARTS AND OF MASTER OF LAWS.

1. Constitutional Law—A seminar; two hours.

Part 1. First term: The Crown in Canada; the Royal prerogatives; the statutory history of the Judicial Committee of the Privy Council; appeals to the Committee; the Supreme Court of Canada and appeals thereto; the organization of courts in the Provinces.

Part II. Second term: A careful advanced review of Canadian federalism from statutes and cases; some precedents from the decisions of Courts in the United States.

A previous standard course in constitutional law or the Government of Canada, in this or some other recognized University, is essential for admission to this course. Dr. MacKay.

2. International Law—A seminar; two hours.

Part I. First term: International Law since 1856; the Treaty of Paris (1856); the Geneva Conventions; the Hague Conventions; the post-war treaties and The League of Nations; International Courts of Justice.

Part II. Second term: The history of International Law and Diplomacy between Great Britain, Canada and the United States since 1783; the growth of Canadian autonomy.

A previous beginner's course in International Law is essential for admission to this course. Dr. Mackay.

COURSES FOR THE DEGREE OF MASTER OF LAWS.

3. The Law of Trusts (Common Law): The theory of the trust: early history of trusts and uses; the statute of uses; subsequent developments of the law of trusts; the modern law; comparison of Roman and common law principles. Selected cases and statutes.....Professor Smith.

4. The Law of Wills (Common Law): Origin and history of the English will; comparison with the development of the Roman will; formal requirements; principles of interpretation; duties of executors and administrators; testamentary capacity; restrictions on the right of testation. Selected cases and statutes.....Professor Smith.

5. Commercial Law: A seminar—one hr. For students proceeding to the LL.M. degree who have chosen a Commercial Law subject for their thesis. Such branch of Commercial Law as may be chosen will be treated historically and comparatively....Assistant Professor Tyndale.

6. Further special courses leading to the Degree of Master of Laws in suitable and sufficient subjects may be arranged with the Dean and the Faculty.

DEPARTMENT OF MATHEMATICS.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

JAMES HARKNESS:—*Professor of Pure Mathematics.*

ASSOCIATE OF THE FACULTY.

DANIEL A. MURRAY:—*Professor of Applied Mathematics.*
ALBERT H. S. GILLSON:—*Associate Professor.*
CHARLES T. SULLIVAN:—*Associate Professor.*

COURSES FOR THE DEGREE OF MASTER.

*1. **General Analysis.**
3 hrs.....Professor Harkness.

*2. **Introduction to the Theory of Functions of a Complex Variable.**
Associate Professor Gillson.

*3. **Introduction to the Theory of Higher Plane Curves.**
1 hr.....Associate Professor Gillson.

4. **Selected Topics in the Theory of Functions.**
3 hrs.....Professor Harkness.

The topics to be selected will be adapted to the mathematical needs and training of students wishing to take the course. Attention will be paid to Riemann's methods and to such collateral subjects as finite groups, the theory of invariants, and birational transformations.

5. **The Differential Equations of Mathematical Physics.**
3 hrs.....Associate Professor Gillson.

One hour a week of this course will be devoted to the theory of the potential. Particular attention will be paid in the remaining part of the course to Laplace's equation and to the wave-equation, with applications to problems in elasticity, electro-magnetism and hydrodynamics.

6. **Differential Geometry.**
3 hrs.....Associate Professor Sullivan.

7. Projective Geometry.
3 hrs.....Assistant Professor Matthews.

8. Differential Equations and Advanced Calculus.
2 hrs.....Professor Murray.

9. Harmonic Analysis.
2 hrs.....Associate Professor Sullivan.

10. Theory of Generalized Relativity.
1 hr., 1st term.....Professor Harkness

Courses 8 and 9 are intended specially for graduates in the Faculty of Applied Science who are proceeding to the M.Sc. degree in courses in Applied Science; *e.g.* in Electrical Engineering, or in Civil Engineering. They will be minors among the courses taken by candidates for this M.Sc. degree, and are based necessarily on the mathematics taken in preparation for the B.Sc. degree in Applied Science. They are, however, open to students other than in Applied Science.

No. 10 is a continuation of a course given during the session of 1922-23.

DEPARTMENT OF PHYSICS.

MEMBERS OF THE FACULTY OF GRADUATE STUDIES.

A. Stewart Eve:—*Macdonald Professor of Physics and Director of the Physics Building.*
Louis V. King:—*Macdonald Professor of Physics.*

ASSOCIATES OF THE FACULTY.

Joseph A. Gray:—*Associate Professor of Physics.*
A. Norman Shaw:—*Associate Professor of Physics.*

COURSES FOR THE DEGREES OF MASTER OF SCIENCE AND DOCTOR OF PHILOSOPHY.

***6a. Electrical Measurements.**
2 hrs.; Wed., Fri., at 9; 2 hrs. lab.; Wed., 2-6....Professor King.
Text-book:—Law's Electrical Measurements (McGraw-Hill).

***6b. Light.** (Replaced by 8b in alternate sessions.*)
1 hr.; Mon., at 9 (also lab.).....Associate Professor Gray.
Text-books:—Edser's Light (Macmillan); Wood's Physical Optics (Macmillan).

***7a. Electro-magnetic Theory.**
1 hr.; Th. at 11.....Associate Professor Gray.
Text-book:—Sir J. Thomson's Elements of Electricity and Magnetism (C.U.P.).

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*Courses 6b and 8b will be given in alternate sessions as follows:—6b in '24–'25, '26–'27, etc., and 8b in '23-'24, '25-'26, etc.

***7b. Mathematical Physics.**
2 hrs.; Tu., Sat., at 11.....Professor King.
Text-book:—Houston's Introduction to Mathematical Physics (Longmans).

***8a. Molecular Physics.**
2 hrs.; Wed., Fri., at 9.....Associate Professor Shaw.
Text-book:—Crowther's Ions, Electrons and Ionizing Radiations (E. Arnold).

***8b. Theory of Heat.** (Replaced by 6b in alternate sessions.*)
1 hr.; Mon., at 9 (also 3 hrs. lab.).....Associate Professor Shaw.
Text-book:—Preston's Theory of Heat (Macmillan).

***9. Radioactivity.**
2 hrs.; 2nd term (also 3 hrs. lab.).....Professor Eve.
Text-book:—Rutherford's Radioactive Transformations (C.U.P.).

10. Vector Analysis.
2 hrs.; 1st term.....Professor Eve.
Text-book:—Coffin's Vector Analysis (Wiley).

11. Advanced Statics, Dynamics, Hydrodynamics and Sound.
2 hrs.....Professor King.
Text-books:—Lamb's Higher Mechanics (C.U.P.), Bassett's Hydrodynamics and Sound (Deighton Bell).

12. Kinetic Theory of Matter, and Electron Theory.
2 hrs.....Professor King.
Text-books:—Jeans' Dynamical Theory of Gases (C.U.P.) and Richardson's Electron Theory of Matter (C.U.P.).

13. Quantum Theory and Relativity.
1 hr.....Professor Eve.

14. Advanced Electricity and Magnetism.
2 hrs.....Professor King.
Text-book:—Jeans' Electricity and Magnetism (C.U.P.).

15. Laboratory Practice and Physical Manipulation.
1 hr. (also 2 hrs. lab.) . . . Assistant Professor D. Keys, Mr. H. T. Pye.
A course of practical instruction on the use of tools (including the lathe), glass-blowing, photography and the construction of simple apparatus. This course is designed as an aid and introduction to original research.

16. Thermodynamics.
1 hr.....Assistant Professor Shaw.
(Alternate sessions, 1924–25, 1926–27.)

17. Atomic Theories.
1 hr.....Associate Professor Gray.

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*Courses 6b, and 8b will be given in alternate sessions as follows:—6b in '24–'25, '26–'27, etc., and 8b in '23–'24, '25–26, etc.

A selection of courses from 6a to 9 may be made in the case of Physics, being a minor subject. A general paper on elementary Physics is also given when Physics is a minor subject.

As a major course, M.Sc. or Ph.D., a suitable selection will be made from the above courses (6a to 17). 6a to 9 are usually covered, however, in the undergraduate Honour Course in Physics.

Graduate students will also take part in the Physical Society, the weekly Journal Club, and the weekly Colloquium.

DEPARTMENTS OF CHEMISTRY.

MEMBERS OF THE FACULTY OF GRADUATE STUDIES.

R. F. RUTTAN:—*Macdonald Professor of Chemistry and Director of the Chemistry Department.*

J. F. SNELL, B.A., Ph.D.:—*Professor of Chemistry (Macdonald College).*

ASSOCIATES OF THE FACULTY.

F. M. G. JOHNSON:—*Professor of Inorganic Chemistry.*

OTTO MAASS:—*Associate Professor of Physical Chemistry.*

G. S. WHITBY:—*Associate Professor of Organic Chemistry.*

COURSES FOR HIGHER DEGREES.

*1. **Advanced Organic.**
2 hrs. per week.....Dr. Whitby.

*2. **Advanced Inorganic.**
2 hrs. per week.....Dr. Johnson.

*3. **Advanced Physical.**
2 hrs. per week and 6 hrs. laboratory work.....Dr. Maass.

*4. **Colloid Chemistry.**
2 hrs. per week for second term.....Dr. Johnson.

*5. **Synthetical and Quantitative Organic Chemistry.**
Laboratory from 9 to 12 hrs. per week.....Dr. Whitby and Staff.

*6. **Advanced Inorganic and Gas Analysis.**
9 to 12 hrs. per week.....Dr. Johnson and Staff.

7. **Groups of 4 or 5 Lectures on Special Fields of Chemistry.**
1 or 2 hrs. per week.....Senior Member of Staff.

8. **Colloquium.**
1 hr. per week.....Dr. Ruttan.

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*Courses open to Honours students in Arts, B.A. and B.Sc., and as alternatives for students in Chemical Engineering.

9. **Tutorial Inorganic and Physical.**
1 hr. per week.....Drs. Johnson and Maass.

10. **Tutorial, Organic Chemistry.**
1 hr. per week.....Drs. Ruttan and Whitby.

11. **Chemical or Physical Society.**
1 hr. per week.

12. **Supervision of Special Reading, Assistance and Instruction in Research for Thesis.** Research in Organic Chemistry is directed by Drs. Ruttan, Whitby, MacLean and Hatcher; in Inorganic and Physical Chemistry by Drs. Johnson and Maass.

REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE.

1. Advanced courses in (a) Inorganic, (b) Organic, (c) Physical and (d) Colloidal Chemistry. (1 to 6.)

One or more of these courses are open to Honour students and Chemical Engineers. The subject matter of these should be covered on entrance to the Faculty, but few undergraduates take all these courses, therefore candidates in the Faculty of Graduate Studies and Research are allowed to carry two.

2. Colloquium, one per week. Each candidate gives one, and, if time permits, two papers on some recent advances in chemistry. Papers are suggested and criticized by some member of the senior staff. (8.)

3. Attendance at the weekly meetings of the Chemical and Physical Societies. (11.)

4. Special graduate lectures. (7.)

5. Special reading and regular conferences with some member of the senior staff to whom the candidate is assigned. Assistance and instruction is given regarding the technique and literature of the Master's thesis. (12.)

REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

1. Many advanced courses to undergraduates and graduates (see 1 to 6 above) cover different fields of chemistry each year. If the subject matter of a course be new to a graduate student, he should take this course.

2. Colloquium, for each of the three years, as above. (11.)

3. Attendance at Chemical and Physical Societies (8); each candidate is expected to give one lecture during his course.

4. The graduate lectures (7) are not on the same subjects two years in succession. They are attended for three years.

5. Supervision of reading and regular conferences. (12.)

6. Tutorial classes. (9.)

7. Supervision and direction of research work by the member of the senior staff under whom the candidate is working. If the candidate is unable to suggest an acceptable piece of work, a special problem will be assigned to him.

The following courses are given at Macdonald College:—

COURSES FOR THE DEGREE OF MASTER OF SCIENCE.

Prerequisites:—Courses in inorganic, organic and analytical chemistry. Training in qualitative and quantitative analysis. Courses in physics.

*1. **Chemistry of soils and fertilizers.** Laboratory practice in analysis of soils and fertilizers. Hours for graduates variable. Two lectures a week during the fall term. Supplementary reading.

*2. **Chemistry of Animal Nutrition.** Laboratory work in analysis of feeding stuffs and in physiological chemistry. Hours for graduates variable. Two lectures a week during the spring term. Supplementary reading.

*3. **Chemistry of Insecticides and Fungicides.** Discussion of the composition of commercial insecticides and fungicides and of the chemical changes involved in the preparation of spraying mixture. One lecture a week during the spring term.

*4. **Analysis of Insecticides and Fungicides.** Discussion of the methods employed in the analysis of insecticides and fungicides and of the chemical principles involved. Laboratory practice in the analysis of commercial products. Hours for graduates variable. One lecture a week during the spring term.

*5. **Dairy Chemistry.** Laboratory practice in the analysis of milk and its products. Hours for graduates variable. Two lectures a week during the fall term.

*6. **Food Chemistry.** Laboratory practice in food analysis. Hours for graduates variable. Two lectures a week during the spring term.

7. **Tutorial in Physical Chemistry.** One hour a week.

8. **Tutorial in Colloid Chemistry.** One hour a week.

9. **Tutorial in Biochemistry.** One hour a week.

10. **Seminar.** One hour a week.

Graduates taking chemistry as a major subject must take part in the Seminar and must take the equivalent of at least six lecture hours from courses 4 to 10 (inclusive) as set forth above.

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* These are also given as undergraduate courses.

DEPARTMENT OF BIOCHEMISTRY.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

ARCHIBALD BYRON MACALLUM:—*Professor of Biochemistry.*

ASSOCIATE OF THE FACULTY.

GEORGE ERIC SIMPSON:—*Assistant Professor of Biochemistry.*

COURSES FOR THE DEGREE OF MASTER OF SCIENCE.

Advanced lectures and laboratory work on the following:—

1. **General Biochemistry.**
2. **The Chemistry of Animal Metabolism.**

These courses will involve about sixty lectures and about two hundred hours of laboratory work, the latter in addition to the research for the preparation of the dissertation for the degree.

Candidates who desire to proceed to the M.Sc. degree in biochemistry must have a good knowledge of chemistry (inorganic, organic and physical) and must have taken (or must take concurrently with the work for this degree) all the undergraduate work in biochemistry.

COURSES FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

The courses offered by the department, covering what will be required for biochemistry as a major subject for the degree, will involve the extension of those listed above and also the following:—

1. **Organic Colloids in their Chemical and Physical Relations.**
2. **Laboratory Methods of Synthesis of a Number of Bio-organic Compounds.**
3. **Energy Transformation in the Animal and Vegetable Cell.**
4. **Problems of Biophysics.**
5. **Methods and Results in the Microchemistry of the Animal and Vegetable Cell.**

These courses will involve about one hundred lectures, to be given in the two later of the three years required for the degree. The candidate must attend and participate in the colloquia held fortnightly for graduate students in the department.

The requirements for registration for the degree of Ph.D., with Biochemistry as the major subject, are the same as those for the M.Sc. degree.

DEPARTMENTS OF BOTANY.

MEMBERS OF THE FACULTY OF GRADUATE STUDIES.

FRANCIS E LLOYD:—*Professor of Botany.*
BERTRAM T. DICKSON:—*Professor of Botany (Macdonald College).*

ASSOCIATES OF THE FACULTY.

CARRIE M. DERICK:—*Professor of Morphological Botany.*
J. G. COULSON:—*Lecturer on Botany (Macdonald College).*

COURSES FOR THE DEGREE OF MASTER OF SCIENCE.

1. **Embryology of the Spermatophyta.**
   4 laboratory hours, including conference.....Professor Lloyd.
2. **Taxonomy.** Critical Studies.
   4 laboratory hours.....Professor Lloyd.
3. **History of Botany.** Reading.
   4 hours, including conference
4. **Plant Galls.**
   4 hours.....Professor Lloyd.
5. **Protoplasmic Studies**
   4 hours.....Mr. Scarth.
6. **Cytology**
   4 hours.....Professor Lloyd.
7. **Morphology of the Angiosperms.**
   4 hours.....Professor Derick.
8. **Plant Physiology.** Repetitional Studies.
   8 hours.....Professor Lloyd.
   Mr. Scarth.

Three courses, having the approval of the Head of the Department, must be taken.

COURSES FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

9. **Experimental Plant Morphology.** Problems and Research.
   1 lecture; 12 hours laboratory.....Professor Lloyd.
10. **Plant Physiology.** Problems and Research.
    (a) Cellular physiology; biophysics and biochemistry of the cell
    (b) Growth, irritability and reproduction.
    (c) Nutrition and respiration.
    2 hours conference; 12 hours laboratory.....Professor Lloyd.
    Mr. Scarth.
11. **Phytogenetics.**
    2 lectures; 12 hours laboratory.....Professor Derick.

12. Phytopathology.
(a) Lectures and reading.
(b) Experimental work.
2 lectures; 12 hours laboratory.....Professor Derick.

13. Colloquium—Weekly.
This will be attended by candidates for the degree of M.Sc. also; they will give at least two presentations, while candidates for the degree of Ph.D. will give at least four.

14. Journal Club. Weekly.
In the second year leading to this degree, four approved courses must be taken.

Candidates should, except for special reasons, take chemistry or physics as a minor. For genetics, statistical methods are required.

Attendance at weekly colloquia and Journal Club meetings is required of all candidates for higher degrees. Presentation by candidates of the results of published research is also required.

The following courses are given at Macdonald College:—

The Graduate work given in this department is in the field of Plant Pathology and Mycology.

Candidates must have completed satisfactory undergraduate courses in plant morphology, physiology, taxonomy, histology, and cytology. Specialists in Plant Pathology should possess a general knowledge of the fundamental practices in agronomy and horticulture.

15. History of Plant Pathology. One lecture per week for one term. Extra reading required.

16. Systematic Mycology. Two lectures and two laboratory periods per week. A detailed study dealing with taxonomy, morphology, etc.
(a) Myxomycetes and Phycomycetes. 2nd term, 1923-24.
(b) Ascomycetes and Adelomycetes. 1st term, 1924-25.
(c) Basidiomycetes. 1st term, 1923-24.

17. Advanced Plant Pathology. Detailed studies of plant diseases; culture and inoculation work; field and greenhouse tests in control measures, etc. Two lectures and two laboratory periods per week for two terms.

18. Physiology of the Fungi. Nutrient requirements; carbon sources in nutrition; nitrogen fixation; enzymes in nutrition; H-ion concentration; temperature, light and moisture conditions; chemotropism; phototropism; staling; spore germination conditions; biologic specialization; physiology of parasitism; symbiosis. Two lectures and two laboratory periods per week for one term.

19. Phytopathological Histology. A study of abnormal plant structures caused by myxomycetes, fungi, bacteria, insects, etc., preparation of slides, photomicrographs, etc. One lecture and two laboratory periods per week for one term.

20. Cytology of the Fungi. Studies of sexuality; nuclear phenomena; formation of sporangium, conidium, pycnidium, perithecium, etc.; origin of setae, cystidia, etc.; development of chlamydospores, sexual and asexual spores, etc. Two lectures and two laboratory periods per week for one term.

21. Special Technique. A course covering the principles of photography; the preparation of plates, prints, lantern slides, photomicrographs, etc.; the use of filters; enlarging, reproducing. Training in glass-blowing may also be arranged. One lecture and four laboratory hours for one term.

22. Seminar. A course entailing reading, discussion, appreciation and criticism of research articles, monographs, etc., in the field of general botany, physiology, cytology, histology, morphology, ecology, taxonomy, genetics, mycology, pathology. Attention will be more especially directed to such articles as have application in plant pathology or mycology. One period per week.

The course leading to the degree of Master of Science given at Macdonald College consists of 15, 22, two of 16a, 16b, 16c, and one other.

Only two years of the course leading to the degree of Doctor of Philosophy are given at Macdonald College. During these two years the candidate must take all the courses listed above.

The third year for the degree of Doctor of Philosophy may be taken by arrangement at McGill College (Montreal) or at some other approved University.

DEPARTMENT OF ZOOLOGY.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

ARTHUR WILLEY:—*Professor of Zoology.*

ASSOCIATE OF THE FACULTY.

J. STAFFORD:—*Assistant Professor.*

COURSES FOR THE DEGREE OF MASTER OF SCIENCE.

*1. **Zoology of Invertebrata.**
2 hours lecture, 4 hours laboratory.

*2. **Colloquium.**
1 hour.

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*These are also honour courses in the Faculty of Arts.

*3. **Zoology of Vertebrata.**
2 hours lecture, 3 hours laboratory.

*4. **Comparative Embryology.**
2 hours lecture, 2 hours laboratory, 2nd term.

*5. **General Zoology.**
2 hours lecture, 2 hours laboratory.

6. **Parasitology.**
2 hours lecture, 2 hours laboratory.

7. **Protozoology.**
2 hours lecture, 2 hours laboratory.

8. **Ecology.**
2 hours lecture, 2 hours laboratory.

DEPARTMENT OF BACTERIOLOGY.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

FRANCIS CHARLES HARRISON:—*Principal, Dean of the Faculty of Agriculture and Professor of Bacteriology.*

(These courses are given at Macdonald College.)

COURSES FOR THE DEGREE OF MASTER OF SCIENCE.

Numbers 1 and 2, together with any one of numbers 3, 4, 5 or 6 of the courses set forth below.

COURSES FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

All those set forth below, together with certain others in Pathogenic Bacteriology and Serology given in the Faculty of Medicine.

1. **Cytology, Morphological Studies and Technique.**
One lecture and four laboratory hours for one term.

2. **General and special Technique, Glass Blowing, Photography and Photomicrography.**
One lecture and four laboratory hours for one term.

3. **Dairy Bacteriology.** Technique, a comprehensive survey of the bacteria of milk and its products.
One lecture and six laboratory hours per week for one year; six colloquia.

4. **Food Bacteriology.** Technique, a general survey of the bacteria of food and a special study of a group of foods.
One lecture and six laboratory hours per week for one year, six colloquia.

5. **Soil Bacteriology.** Technique and special methods, a general and special study of the microbiology of the soil. One lecture and six laboratory hours per week for one year; six colloquia.

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*These are also honour courses in the Faculty of Arts.

6. Bacterial Diseases of Plants. Technique and special methods. Bacterial plant diseases prevalent in Canada and the Northern United States.

One lecture and six laboratory hours per week for one year; six colloquia.

Prerequisites for students taking Bacteriology as their major subjects are:—At least one course in general bacteriology of a year's duration; chemistry (inorganic and organic), and physics. More chemistry, such as biochemistry and physical chemistry are advised. Students selecting soil bacteriology should have had previous courses in farm crops and soils. Students taking dairy bacteriology should have a good knowledge of dairy practice and the usual undergraduate courses.

Course 1 or 2 may be taken as a minor in a cognate course.

DEPARTMENT OF ENTOMOLOGY.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

WILLIAM LOCHHEAD:—*Professor of Entomology and Zoology.*

(These courses are given at Macdonald College.)

COURSES FOR THE DEGREE OF MASTER OF SCIENCE.

1. Advanced Systematic Entomology.

One lecture and four laboratory hours. Prerequisite courses 1 and 2 of B.S.A. course. (See Announcement of Macdonald College).

2. The History and Literature of Entomology.

One lecture for one term.

3. Insect Morphology.

A comparative study of insect anatomy; the histology, development and phylogeny of insects; research on assigned topics.

Two lectures and four hours laboratory.

4. Advanced Economic Entomology. A continuation of course 9 of the B.S.A. course (see Announcement of Macdonald College), but covering a broader field, including the rôle of insects in transmitting disease to man and domestic animals and to plants; methods in practical entomology; research.

Two lectures and four hours laboratory.

Colloquia on assigned readings, current literature and research will be held at the discretion of the instructors.

Courses offered by the Department of Zoology may also be taken.

DEPARTMENT OF ANATOMY.

MEMBER OF THE FACULTY OF GRADUATE STUDIES

S. ERNEST WHITNALL:—*Professor of Anatomy.*

ASSOCIATE OF THE FACULTY.

JAMES C. SIMPSON:—*Associate Professor of Histology and Embryology.*

COURSES FOR THE DEGREE OF MASTER OF SCIENCE.

1. Anatomy.

(a) Special course on the detailed structure of the ear, nose and throat (for specialists in Oto-Laryngology).

(b) Special course on the detailed structure of the orbit and eye (for specialists in Ophthalmology).

Both these courses include the histology and surgical anatomy of the regions noted, and facilities are afforded for practical dissection and operative work as far as may be possible. The courses consist of laboratory work, study of preparations in conjunction with selected works of reference, and followed by colloquia. Each course extends over two months, with attendance of two hours a morning on two days a week by arrangement.

Professor S. E. Whitnall.

2. Histology.

*(a) A course on the histology of the tissues and organs in human and mammalian types. 150 hours laboratory and 30 hours lecture work extending through the Session (six hours a week).

(b) A special advanced course in Dental Histology. 12 two-hour periods for 12 weeks, or by arrangement.

Professor J. C. Simpson.

(c) A course on Histological Technique; 3 two-hour periods a week for 30 weeks of laboratory work and colloquia.

Professor J. C. Simpson.

3. Embryology.

*General course in Organogenesis. 60 hours of lectures and demonstrations; two periods a week.

4. Anthropology.

Instruction in the principles, aims and methods of Physical Anthropology. Colloquia and laboratory work. Times to be arranged.

Dr. I. M. Thompson.

DEPARTMENT OF PHYSIOLOGY.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

JOHN TAIT:—*Professor of Physiology.*

COURSES FOR THE DEGREE OF MASTER OF SCIENCE.

*1. **Senior Laboratory**—chiefly mammalian experimental work. 3 hours.....Dr. Green.

2. **Advanced Physiology.**

In this course certain branches of the subject will be selected for more detailed treatment because of their special medical or scientific interest. It is proposed this session to treat among other subjects the lymphatic system and vascular lining, cerebro-spinal fluid, central nervous system and endocrine glands.

2 hour lectures for 1 term. Professor Tait and Staff.

3. **Structure and Function.**

This course includes a review of modern work in biology in which structure, whether of the developing or of the adult animal, has been investigated by experimental means. The aim is to show the scope and place of physiology and of physiological method in relation to such problems. A special study will be made of structural adaptations to physically new environment.

2 hour lectures for 1 term. Professor Tait.

4. **Blood and Circulation.**

This course, designed in part for clinicians, will include lectures, laboratory work and demonstrations. The following questions will receive consideration:—Life history of the corpuscles, hæmoglobinometry, hæmocytometry, hæmolysis, blood transfusion, coagulation and arrest of hæmorrhage, cytology of the cerebro-spinal fluid, methods of recording pulse and blood pressure, electrocardiography and experiments on the excised heart and vessels.

1 hour lectures and 30 hours laboratory. Drs. Green, Cassidy and Giblin.

5. **Physiological Colloquium.**

This meets weekly and is limited to those engaged in research in the department.

Colloquium, 2 hours.

6. **Tutorial Class.**

Colloquium, ½ hour. Professor Tait.

COURSES FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

Courses for a second year, toward the degree of Doctor of Philosophy, may be selected from those set forth above which have not already been taken in the first year of graduate study.

Students' Physiological Society.

Both undergraduate and graduate students will find it of advantage to become members of the Students' Physiological Society. In addition to the privilege of hearing from time to time addresses on special departments of the subject, members are entitled to consult and to borrow books from the library of the Society, which contains many standard text-books and special works.

The advanced courses in physiology have been designed with two things in view: (1) to provide higher training for graduates who look forward to an exclusively academic career either in physiology or in some cognate branch of biological or medical science; (2) to offer increased facilities of study to the younger clinicians of the school. The work is arranged to meet the individual needs of each student.

DEPARTMENT OF PHARMACOLOGY.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

————————————*Professor of Pharmacology.*

ASSOCIATE MEMBER OF THE FACULTY.

Raymond L. Stehle:—*Associate Professor of Pharmacology.*

Candidates for the higher degrees must present evidence of suitable preparation in physiology, organic chemistry and biochemistry, and at the earliest possible date must complete all of the undergraduate work in pharmacology.

COURSES FOR THE DEGREE OF MASTER OF SCIENCE.

1. ***Advanced Practical Pharmacology.**
Laboratory 90 hrs. and lecture demonstrations 15 hrs.
Professors ——— and Stehle.

2. **Colloquium.**—Each candidate for the Master's degree is required to present a report from the current literature at least once a month.
30 hrs.....Professor ——— and Staff.

3. General Pharmacology.—Pharmacology of the cell; theories of narcotic, convulsant and peripheral nerve action; synergism and antagonism; tolerance; hypersensitivity; influence of special conditions upon drug action.

Laboratory work 60 hrs. and conference 30 hrs. . . . . Professor ———

4. Chemical Pharmacology.—A lecture course with demonstrations, designed for students specializing either in synthetic chemistry or pharmacology. Emphasis is placed upon the relation of chemical structure to pharmacological action.

15 hrs. . . . . Professors ——— and Stehle.

COURSES FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

Required:

Continued participation in the **Colloquium** (Course 2) in all years. 30 hrs.

The following course must be pursued for at least two years:—

5. History and Literature of Pharmacology.—Supervised reading. 45 hours. . . . . Professor ———

Optional:

6. Pathological Pharmacology.—Special lectures on the theory of the action of drugs in disease.

15 hrs. . . . . Professor ———

7. Advanced Toxicology.—Special instruction in methods of identification of poisons in the tissues.

Laboratory 30 hrs. . . . . Professor Stehle.

8. Special Methods.—Practical instruction in the technique of special chemical and physiological methods employed in pharmacology. Methods of bio-assay may be emphasized

Laboratory 30 hrs. . . . . Professors ——— and Stehle.

Work in Cognate Subjects.—Other courses of value in the training of the pharmacological student include:—

Advanced organic, physical and colloidal chemistry; comparative anatomy; general and special physiology; biochemistry; pathology; bacteriology; experimental human physiology; radioactivity.

DEPARTMENT OF GEOLOGY AND MINERALOGY.

MEMBERS OF THE FACULTY OF GRADUATE STUDIES.

FRANK D. ADAMS:—*Professor of Geology and Palæontology.*
J. AUSTEN BANCROFT:—*Professor of Geology.*

ASSOCIATES OF THE FACULTY.

RICHARD P. D. GRAHAM:—*Associate Professor of Mineralogy.*
JOHN J. O'NEILL:—*Assistant Professor of Geology.*

COURSES FOR THE DEGREE OF MASTER OF SCIENCE.

Students must take Courses 1 to 7, inclusive.

1. **General Geology.**—As in "Text Book of Geology," by Pirsson and Schuchert, vols. 1 and 2. To be read by students, with occasional colloquia.
2. **Geological Colloquium.**—Papers on a great variety of geological topics are assigned to students for review and concise presentation as a preface to general discussion. Each year, this course must be taken by all graduate students in Geology. 1 hr. per week.
3. **Ore Deposits.**—As in "Mineral Deposits," by Lindgren; "Economic Aspects of Geology," by Leith; and "Principles of Economic Geology," by Emmons.
   Colloquium, 4 hrs. per week.....Assistant Professor O'Neill.

*4. **Optical Mineralogy.**—Methods of determining the various optical properties of minerals. Optical chapters in Miers' "Mineralogy" and Dana's "Text Book of Mineralogy"; Tutton's "Crystallography and Practical Crystal Measurement." 1 lecture and 1 laboratory period per week during the first term..Associate Professor Graham.

5. **Petrography.**—As in "Petrology for Students," by Harker, and "Essentials for the Microscopical Determination of Rock-forming Minerals and Rocks," by Johannsen. At least 9 hrs. laboratory per week.
6. **Palæontology.**—1 hr. lecture and 1 laboratory period per week.

*7. **Physiography.**—This course must be taken by those who have not taken it in Fourth Year Arts.
   2 lectures per week.....Professor Bancroft.

Students who have completed Undergraduate Courses in general geology, mineralogy, determinative geology, petrography, Canadian geology, historical geology and ore deposits and economic geology, or their equivalents, may expect to complete their M.Sc. course in one year; otherwise two years are necessary for this Degree.

COURSES FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

(Second and Third Years.)

8. **Advanced Petrography.**—"Igneous Rocks," by Iddings, vols. 1 and 2; "Natural History of Igneous Rocks," by Harker; "Rocks and Rock Weathering," by Merrill.
Reference books:—"Massige Gesteine," by Rosenbusch, and "Lehrbuch der Petrographie," by Zirkel.
At least 9 hrs. laboratory work per week.

9. **Advanced Mineralogy.**—Studies of the less common minerals and their determination by optical and other characters. Assigned readings on constitution, isomorphism, alteration, etc., of minerals, and general geophysical data as represented by papers published by the Carnegie Geophysical Laboratory.
3 hrs. laboratory per week.....Associate Professor Graham.

10. **Advanced Economic Geology.**—Assigned readings and studies of outstanding examples of various types of mineral deposits and of the application of Geology to the petroleum industry and to engineering problems; the preparation of geological reports.
Colloquium, 1 hr. per week.....Professor Bancroft.

11. **Advanced Structural and Dynamical Geology.**—As in "Das Antlitz der Erde," vols. 1, 2, 3, and 4, by E. Suess. Students are also held responsible for "Structural Geology," by Leith; "Metamorphic Geology," by Leith and Mead; "Bild und Bau der Schweizer Alpen," by C. Schmidt; "Mechanics of Appalachian Structure," by Willis (13th Ann. Report U.S.G.S.); Selected Readings from "Mechanismus der Gebirgsbildung," by Heim, and "Treatise on Metamorphism," by Van Hise; numerous papers on mountain building and isostasy.
At least 2 hrs. colloquia per week..Professors Adams and Bancroft.

12. **Physiography.**—"Earth Structure," by Jas. Geikie; "Physiography," by Salisbury; "Scenery of Scotland," by Sir Archibald Geikie, and assigned reports and papers pertaining to particular districts.
Professor Bancroft.

13. **Advanced Palæontology.**
1 hr. lecture and one laboratory period per week.

14. **General Reading.**—"Aspects of the Earth," by Shaler; "The Voyage of the Beagle," by Darwin; "Age of the Earth," by Sollas; "Geological Sketches," by Sir Archibald Geikie; "Founders of Geology," by Geikie; "Biological Essays," by Huxley; etc.

15. **Geological Colloquium.**—Same as Course 2, but must be taken each year by all graduate students. 1 hr. per week.

Ph.D. Students must complete Applied Science, Chemistry 58, 61 and 62, if not previously taken.

The Final (Third) Year of the Ph.D. course will be almost exclusively devoted to research work in connection with the preparation of the thesis.

DEPARTMENT OF CIVIL ENGINEERING AND APPLIED MECHANICS.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

HENRY MARTYN MACKAY:—*Professor of Civil Engineering*

ASSOCIATES OF THE FACULTY.

ERNEST BROWN:—*Professor of Applied Mechanics and Hydraulics.*
CYRIL BATHO:—*Associate Professor of Applied Mechanics.*

COURSES FOR THE DEGREE OF MASTER OF SCIENCE

1. **Statically Indeterminate Stresses.**—General methods of stress analysis, influence lines, applications to braced arches, rectangular frameworks, etc.; theory of riveted joints; columns with lateral and intermediate loads, etc. One term, 2 hrs. tutorial, and 6 hrs. computation and reports.
Associate Professor Batho.

2. **Technical Elasticity.**—The general equations of elasticity with various applications (special attention being paid to approximate numerical solutions); strength of flat plates, etc.; torsion of thin tubes and prisms of non-circular section; the determination of stress distribution by means of polarized light; elastic stability; vibration of structures. One term, 2 hrs. tutorial, and 6 hrs. computation and reports.....
Associate Professor Batho.

3. **Secondary Stresses.**—Secondary stresses due to rigidity of joints, deflection of floor beams, eccentric connections, latticing, etc.; critical discussion of specifications for structural members in the light of tests. One term, 2 hrs. tutorial, and 6 hrs. computation and reports.....
Professor MacKay.

4. **Reinforced Concrete Arches (Advanced).**—Preliminary design, development of influence lines, unsymmetrical arches, elastic piers, economics of concrete arches, etc. One term, 1 hr. tutorial, and 6 hrs. computations and reports.....Professor MacKay.

5. (a) **Aerodynamics.**—Fluid motion; the principles of flight, scale effect, experimental methods and results; prediction of performance; equations of motion; stability of aircraft; propellers, etc.

(b) **Structural Design of Aircraft.**—Loading conditions during flight; detailed calculations of structural strength.
Associate Professor Batho.

6. **Hydraulics.**—General principles of hydrology in relation to power development; stream gauging and use of records; flow in streams and in open channels of regular form; effect of dams and obstructions; backwater computations; the principles of hydraulics as applied to modern turbines; general trend of turbine development; turbine testing and characteristics; special problems such as pressure surges in conduits; general consideration of water-power plants, including the study of plants in operation.

Session 1 hr. tutorial, and 6 hrs. computation and reports.

Professor Brown.

DEPARTMENT OF ELECTRICAL ENGINEERING.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

LOUIS A. HERDT:—*Professor of Electrical Engineering.*

ASSOCIATE OF THE FACULTY.

CLARENCE V. CHRISTIE:—*Associate Professor of Electrical Engineering.*

COURSES FOR THE DEGREE OF MASTER OF SCIENCE.

1. **Advanced Mathematics.**—Lectures and study under the direction of the Department of Mathematics.

Lectures, 2 hours.....

2. **Electrical Physics.**—Lectures and study under the direction of the Department of Physics.

Lectures, 2 hours.....

3. **Course of Reading.**—This covers general and fundamental electrotechnics in addition to the references on the specialized subject of the thesis.

4. **Thesis.** Colloquia and Laboratory work.....to be arranged.

The thesis will be in one of the following fields of investigation:

(a) Design, characteristics and testing of electrical machinery; investigation of special machinery; special problems of design.

Professor Herdt.

(b) Properties of dielectrics and electric insulators; laboratory instruction and experimental investigation, with facilities for high voltage testing.....Associate Professor Christie.

(c) Design, characteristics and testing of electrical engineering measuring instruments and devices. Facilities are available for precision measurements of most of the electrical quantities. Laboratory investigation of new types of measuring instruments and development of special devices.....Mr. Wallace.

(d) Investigation of devices for protection of electrical power systems; laboratory testing of relays and other devices; development of special types.

Assistant Professor Burr.

A workshop is available for the construction of special apparatus for research work.

DEPARTMENT OF MECHANICAL ENGINEERING.

ASSOCIATES OF THE FACULTY OF GRADUATE STUDIES.

CHARLES M. MCKERGOW:—*Professor of Mechanical Engineering.*
ARTHUR R. ROBERTS:—*Associate Professor.*

COURSES FOR THE DEGREE OF MASTER OF SCIENCE.

1. **Engineering Thermodynamics.** Prerequisites, Courses 220 and 251 (see Announcement of the Faculty of Applied Science).

This course comprises:—

(a) A series of colloquia, supplemented by a course of reading on the theory of heat-power apparatus, such as steam turbines, internal combustion engines and refrigeration, the laws of heat transfer, the character of fuels and the phenomena of combustion, etc.

(b) Experimental investigation of a particular problem, with a thesis.
Professor McKergow and Associate Professor Roberts.

or

2. **Machine Design.** Prerequisites, Courses 225 and 242 (see Announcement of the Faculty of Applied Science).

This course comprises:—

(a) A series of colloquia, supplemented by a course of reading on special topics; friction and lubrication, efficiency and design of gearing, vibration and balancing, metal cutting tools and more advanced problems in design.

(b) Experimental investigation of a particular problem, with thesis.
Professor McKergow and Associate Professor Roberts.

DEPARTMENT OF METALLURGICAL ENGINEERING.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

ALFRED STANSFIELD:—*Professor of Metallurgy.*

COURSES FOR THE DEGREE OF MASTER OF SCIENCE.

1. **Electro-Metallurgy.**—A course of lectures and laboratory work covering in a more advanced manner the subject outlined in course 275 (see Announcement of the Faculty of Applied Science).
2 hrs. lectures and 6 hrs. lab. ..... Professor Stansfield.

2. **Metallurgical Engineering.**—Advanced work on materials of construction and metallurgical design. Laboratory work on the properties of metals and refractory materials and the use of metallurgical testing instruments. Drafting-room work on metallurgical design.
2 hrs. lectures and 6 hrs. lab. and drafting-room ..... Mr. Sproule.

3. **Physical Chemistry of Metals and Alloys.**—The application of physical chemistry to metals and metallic alloys and to metallurgical reactions. Laboratory work on metallography, cooling curves of alloys, and typical metallurgical reactions.

2 hrs. lectures and 6 hrs. lab. . . . . Professor Stansfield and Mr. Roast.

DEPARTMENT OF MINING ENGINEERING.

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

JOHN BONSALL PORTER:—*Professor of Mining Engineering and Director of the Mining Building.*

ASSOCIATE OF THE FACULTY.

JOHN W. BELL:—*Associate Professor of Mining Engineering.*

COURSES FOR THE DEGREE OF MASTER OF SCIENCE.

A. *Undergraduate Courses open to Graduate Students who have not already taken them.*

1. **Mining Engineering.** Course 297 in the Faculty of Applied Science (see the Announcement of that Faculty). The whole of this course of three lectures per week for two terms, or selected portions of it (methods of mining), is suitable as part of the requirements for the degree of M.Sc.

2. **Mining Machinery and Design.** Course 298 in the Faculty of Applied Science (see the Announcement of that Faculty). The whole of this course of two lectures per week for one term, or selected portions of it (as hoisting machinery, etc.), are suitable as part of the requirements for the M.Sc. degree.

3. **Advanced Mining.** Course 299 in the Faculty of Applied Science (see Announcement of that Faculty). One lecture per week for two terms. This course is taken by one section only of the Undergraduate class in Mining and is suitable as advanced work for other students for the degree of M.Sc.

B. *Advanced courses open to Graduate Students only.*

4. **The History of Ore Concentration.**—The development of methods and appliances for the concentration and beneficiation of minerals and metallic ores. One lecture per week for one term. . . . . Dr Porter.

5. **Works Organization and Management.** With especial reference to Mining and Ore Dressing establishments. One lecture per week for one term. . . . . Dr. Porter.

6. **The Theory of Rock Crushing and the Determination of the Efficiency of Rock Crushing Appliances.**

One lecture per week for one term. . . . . Professor Bell.

7. **Rock Crushing Laboratory.** Advanced students who wish to supplement course No. 6 by additional laboratory work will be given one or two laboratory periods of two hours each per week for one term.

Professor Bell and Mr. Erlenborn.

8. Sizing of Crushed Material by means of Sieves. The theory and practice of sizing on sieves and similar devices. One lecture and one laboratory period per week for one term... Dr. Porter and Professor Bell.

9. Screen Sizing Laboratory. Students who wish to supplement course No. 8 will be given one or two laboratory periods per week for one term..... Professor Bell and Mr. Erlenborn.

10. The Settling of finely divided Mineral in Water. Theories of classification and settling, the effect of temperature and of various electrolytes, colloids and flocculents, the calculation of settling rates and the design of settling tanks. Two lectures and one laboratory period for one term..... Professor Bell and Mr. Erlenborn.

11. Classification Laboratory. Advanced students who wish to supplement course No. 10 will be given one or two laboratory periods per week for one term..... Professor Bell and Mr. Erlenborn.

12. The Separation of Finely divided Minerals differing in Specific Gravity on Inclined Plane Surfaces. The theory and practice of table concentration. One lecture and one laboratory period per week for one term..... Dr. Porter and Professor Bell.

13. Filtration in Ore Dressing and Cyanidation. Theoretical and practical conditions governing the removal of finely divided and semi-colloidal minerals from water and dilute solutions by means of mechanical filtration apparatus. One lecture and one laboratory period per week for one term..... Dr. Porter and Professor Bell.

14. Filtration Laboratory. Advanced students who wish to supplement course No. 13 will be given one or two laboratory periods per week for one term..... Professor Bell and Mr. Erlenborn.

15. The Cyanidation of Gold and Silver Ores. Advanced studies of the theory and practice of cyanidation. One lecture per week for one term..... Dr. Porter, Professor Bell and Mr. Erlenborn.

16. Cyanidation Laboratory. Advanced students who wish to supplement course No. 15 will be given one or two laboratory periods per week for one term. ..... Professor Bell and Mr. Erlenborn.

17. The Theory and Practice of Flotation. Advanced studies in flotation, surface tension, etc. Two lectures per week for one term.
Professor Bell and Mr. Erlenborn.

18. Flotation Laboratory. Advanced students who wish to supplement course No. 17 will be given one or two laboratory periods per week for one term. ..... Professor Bell and Mr. Erlenborn.

19. Coal Washing. The application of ore dressing methods and of flotation to the preparation and purification of coal. One lecture per week for one term..... Dr. Porter.

20. Coal Washing Laboratory. Advanced students who wish to supplement course No. 19, will be given one or two laboratory periods per week for one term. ..... Professor Bell and Mr. Erlenborn.

21. The Deterioration of Coal in Storage. The oxidation and dehydration of coal on exposure to the atmosphere, spontaneous combustion of coal in mines and storage, and the methods of preventing spontaneous combustion of coal in storage. One lecture per week for one term.

Dr. Porter.

DEPARTMENT OF AGRONOMY.

(These courses are given at Macdonald College.)

MEMBER OF THE FACULTY OF GRADUATE STUDIES.

ROBERT SUMMERBY:—*Professor of Agronomy.*

ASSOCIATE OF THE FACULTY.

ALEXANDER MCTAGGART, Ph.D.:—*Assistant Professor of Agronomy.*

Candidates for the degree of Master of Science in Agriculture (M.S.A.) are expected to have had a good training in general botany, soils, and genetics.

Courses 1, 4, 7 and one other are required. The remaining work to fulfil the requirements for the M.S.A. degree may be chosen from the other courses in Agronomy or in the cognate sciences.

1. Advanced Crop Production. The fundamental principles of crop growth; the methods and practices of crop production. Two lectures for the first term.

2. Forage Crops. Classification, judging, adaptation production, and uses:—(a) Grasses and clovers; (b) Roots and corn. Two lectures and two laboratory periods for one term.

3. Grain Crops. Classification, judging, adaptation, production, uses. One lecture and one laboratory period.

4. Field Crop Breeding. Principles and methods used; variations, correlations, etc., with special reference to economic characters. One lecture and one laboratory period for first term.

5. Forage Crop Breeding. Actual breeding methods and problems involved in:—(a) Grasses and clovers; (b) Roots and corn. One lecture and one laboratory period.

6. Grain Crop Breeding. Actual breeding methods and problems involved. Two lectures and two laboratory periods for one term.

7. Seminar. Current literature and investigations. Periods as arranged by the department. Fortnightly during the year.

DEPARTMENT OF POULTRY HUSBANDRY.

ASSOCIATE OF THE FACULTY.

W. A. MAW, M.S.A.:—*Lecturer in Poultry Husbandry.*

(These courses are given at Macdonald College.)

COURSES FOR THE DEGREE OF MASTER OF SCIENCE IN AGRICULTURE.

1. **Advanced Marketing Principles and Practice.** A study of the present organizations, functions and operations of the market structure both for home and export trade. Each candidate is required to make a survey of marketing conditions in any section of the country that may be indicated. Two hours. (Prerequisite; Course 5; see Announcement of Macdonald College.)

2. **Advanced Poultry Farm Management.** Advanced studies of such divisions of the subject as business methods; economic conditions in chicken, turkey duck and goose farming; general management problems. Whenever possible, trips will be made to study conditions and systems of poultry farming. Two hours. (Prerequisite: Course 9; see Announcement of Macdonald College.)

3. **Seminar.** One meeting a week.

DEPARTMENT OF PHYSICAL EDUCATION.

FOR MEN.

DIRECTOR, DEPARTMENT OF PHYSICAL EDUCATION:—ARTHUR S. LAMB, B.P.E., M.D.

UNIVERSITY MEDICAL OFFICER:—F. W. HARVEY, B.A., M.D.

All students, on entering the University, are required to pass a physical examination (see page 73). By such an examination, any physical defect or weakness may be discovered early, and the student will be advised in regard to treatment. For those defects amenable to treatment by exercise or other hygienic measures, individual attention will be given, and the student will be advised as to what forms of exercise will be likely to prove beneficial or harmful.

I. GENERAL.

The aim of the University requirements in physical education is the maintenance and improvement of the physical well-being of the student body, and the production of graduates who are physically as well as mentally fitted for their life-work.

As voluntary exercise is of greater value than compulsory, great latitude is given the individual student in his choice of the type of activity.

The chief factors limiting this choice are:—

1. The suitability of the exercise as a means of physical education.
2. The physical fitness of the individual student to take the form of exercise chosen.
3. The possibility of effective supervision.
4. The practicability of ensuring regular participation.

The aim is not to replace the existing forms of University athletics, but to assist in developing an interest in these by every legitimate means.

II. REGISTRATION.

1. At the time of registration every male student of the first three years in the Faculties of Arts, Medicine, Dentistry and Science and of the first two years in the Faculty of Law shall be given a printed announcement of the University requirements in physical education.* This announcement shall include a list of the recognized forms of physical activities in which a student may take part in fulfilment of the requirements, and a statement that at the time of his medical examination he will be expected to indicate his choice of the particular forms which he wishes to follow.

**Note.*—For the session 1923-24 and until further notice, this regulation will apply to students of the first two years only in the Faculties of Arts, Science, Medicine and Dentistry.

2. At the time of his medical examination, each student shall be required to fill in a card indicating his choice, as outlined in paragraph III. 1. The Director shall then decide as to his physical fitness for the form chosen and shall inform the student of his decision and note the same on his card, which shall be filed for reference.

3. Every student shall be categorized by the University Medical Officer as either:—

(A) Fit for all forms of physical exercise.
(B) Fit for a limited number of forms.
(C) Fit for gymnasium work only.
(D) Fit for remedial gymnastics, or temporarily unfit.
(E) Unfit for any forms of physical exercise.

III. EQUIVALENTS.

1. Subject to paragraphs 2 and 3 the following activities are recognized as fulfilling the requirements:

University Rugby Football Team.
University Track Team.
University Hockey Team.
University Basketball Team.
University Boxing, Wrestling and Fencing Teams.
University Swimming and Polo Teams.
University Harrier Team.
University Tennis Team.
University Gymnastic Team.
University Indoor Baseball Team.
University Ski Team.
Gymnasium Classes.
McGill Contingent, C.O.T.C.

And such other activities as shall be decided upon from time to time by the Committee on Physical Education.

2. Subject to the approval of the Director, as laid down in paragraph II. 2, any student who desires to participate in competitive athletics, as mentioned in paragraph III. 1, may be excused from other forms of exercise during the season of training, provided that this is performed to the satisfaction of the Director.

3. If successful in making a place on the team, he shall be excused from any other forms of exercise for the season of play, and *may* be excused for the remainder of the term at the discretion of the Director.

4. Any student who has been placed in Categories A, B, C or D at his University medical examination, and who does not voluntarily take part in any of the other recognized forms of exercise as provided above, shall be required to attend the regular gymnasium classes appropriate to his category.

IV. ATTENDANCE.

1. The amount of time required to be devoted to physical exercise by each student shall be two hours per week throughout the session. Until such time as the University is in possession of its own gymnasium, however, this amount of time may be reduced by the Committee on Physical Education to meet the exigencies of gymnasium accommodation.

2. A record will be kept of the attendance of every student as far as his required physical training is concerned.

3. Unexcused absences up to one-eighth of the required number of periods shall be allowed. Unexcused absences exceeding one-eighth, but not exceeding one-fourth, may be allowed if at the end of the session the student passes a special examination and satisfies the Director that he has made sufficient progress. Unexcused absences exceeding one-fourth shall disqualify a student. Such students shall be required to take extra gymnasium class work to the satisfaction of the Director, a supplemental course being given in the month of September for this purpose.

4. At regular intervals during each session and also at the end of each session, the Director of Physical Education shall furnish the Dean of each Faculty with a list of students who have failed to meet the attendance requirements as laid down in the ordinary curriculum, or who have proved unsatisfactory in other respects, and such cases shall be dealt with by the respective Faculties.

No student in default shall be allowed to proceed to the next year of his course unless for special reasons exemption should be granted on the recommendation of his Faculty and approved by the Committee on Physical Education.

Not less than one month before the conferring of degrees in each session the Director shall furnish to the Registrar of the University, for transmission to Corporation and the Faculties concerned a list of all students, being candidates for degrees at the forthcoming Convocation, who have failed to satisfy the requirements of the Committee on Physical Education, and no Diploma for a degree shall be issued to any such candidate unless by the express direction of Corporation.

V. EXEMPTIONS.

Claims for exemption from the above requirements shall be made in the first instance to the Director, who shall refer them to a sub-committee on exemptions appointed by the Committee on Physical Education.

VI. HEALTH.

Provision is made by the Department for the care of the health of undergraduate students during the session. Hospital accommodation is provided for seven days only, except under special circumstances.

A special leaflet concerning this service and the general work of the Department will be supplied to all students at the opening of the session.

VII. MEDALS.

The Wicksteed silver and bronze medals for physical education (the gift of the late Dr. R. J. Wicksteed) are offered for competition to students of the graduating class and to students who have had instruction in the gymnasium for two sessions; the silver medal to the former, the bronze medal to the latter. The award of these medals is made by judges appointed by the Corporation of the University. Every competitor for the silver medal is required to lodge with the judges, before the examination, a certificate of good standing in the graduating class, signed by the Dean or Registrar of the Faculty to which he belongs, and the medal will not be awarded to any student who may fail in his examination for the degree.

VIII. STRATHCONA CERTIFICATE COURSE.

The Departments of Education and Physical Education offer the following courses:—

FOR MEN UNDERGRADUATES OF THE FOURTH YEAR.

A course of 45 hours on the principles and practice of physical education. The course will cover elementary anatomy, physiology and hygiene, the theory of gymnastics and class teaching.

Students who satisfactorily complete this course are entitled to certificate "B" of the Strathcona Trust, and their work is included in the requirements of the High School Diploma of the Province of Quebec.

FOR WOMEN.

(ROYAL VICTORIA COLLEGE)

DIRECTOR OF THE DEPARTMENT:—A. S. LAMB, B.P.E., M.D.
UNIVERSITY MEDICAL OFFICER:—F. W. HARVEY, B.A., M.D.
PHYSICAL DIRECTOR FOR WOMEN:—MISS ETHEL M. CARTWRIGHT.
ASST. PHYSICAL DIRECTOR FOR WOMEN:———

Classes in educational gymnastics for all undergraduates of the College and for resident students of music are conducted in the gymnasium of the Royal Victoria College. All students on entering the University

are required to pass a physical examination (see regulation on page 73) and are also required to pass satisfactory physical tests before taking part in any of the outdoor or indoor physical exercises organized by the Department, whether educational, remedial or recreational.

Work in the Physical Education Department throughout the four-year course (amounting to 140 hours in all) is required of all undergraduate students.* These periods will be used for instruction in personal hygiene and for educational, remedial and recreative gymnastics, according to the physical requirements of the individual. No student will be asked to do work unsuited to her physique, and students debarred from exercise of any kind will be dealt with separately and carefully advised.

Classes in Physical Education required of women students in other faculties than the Faculty of Arts are also held in the gymnasium of the Royal Victoria College.

Partial students are admitted to the classes in educational and recreative gymnastics on payment of a fee of $5.00

Reports of attendance in physical education will be regularly sent to the Faculty.

Strathcona Prizes.—Three first prizes of $8, $10 and $12, and three second prizes of $5, $6, and $9, are open to students for competition in the Second, Third and Fourth Years respectively. Two prizes of $5 are offered for competition to the students of the First Year; one for students who have taken part in educational gymnastics at school, and the other for students who have had no previous physical training.

All competitions will be held under the following regulations:—

1. Competitors will be awarded 50 per cent. of the marks on the work of the session.

2. No prize shall be awarded unless the judges consider the work up to the standard of 75 per cent.

3. The prizes shall not be awarded in the Second, Third and Fourth Years should the winner fail to obtain her full academic standing. The prizes in the First Year shall not be awarded if the winners fail in more than one subject at the sessional examinations.

4. Competitors will be judged on the work taught in the Physical Education Department during the session, the Physical Director for Women arranging all details concerning the competition. A programme of the competitions will be posted not later than March 1st.

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*In all cases of absence the student is required to report to the Physical Director for Women. The ordinary interpretation of the one-eighth rule concerning absences does not apply in this Department. Every student is required to wear the costume recommended by the Department.

5. Judges for these competitions shall be appointed yearly by the Committee on Physical Education.

STRATHCONA CERTIFICATE COURSE.

A course similar to that announced on page 444 is given for the women undergraduates of the Fourth Year.

MILITARY TRAINING.

Canadian Officers' Training Corps.
(McGill University Contingent.)

Honorary Colonel:—General Sir A. W. Currie, G.C.M.G., K.C.B., LL.D.

In order to train undergraduates that they may become men fitted to hold His Majesty's Commissions, a contingent of the Canadian Officers' Training Corps was organized at McGill University two years before the Great War. The contingent is a unit of the Active Militia, being governed by special regulations, under which it cannot be called out for active service as a unit. During the Great War it did splendid service, and many of its members appeared in the rolls of honour.

The training is intended to bring the largest possible number of students up to the standard required for the two certificates:—A, a Lieutenant's, that is, of a man fit to command a platoon; and B, a Captain's, that is, of a man fit to command a Company. The value of these certificates lies in their showing that the candidates have satisfied a board of regular officers at practical examinations that they have developed properly their powers of command, know how to give orders to other men, can retain their self-possession, and can act promptly on their own initiative in a sudden emergency; and further that they have passed the written examinations, in which candidates must show a thorough knowledge of topography, how to organize and look after the welfare of men under their command, and so on. If a member is recommended for a commission in the Active Militia of Canada, or the corresponding military force in any other part of the Empire, the possession of one of these certificates entitles him to promotion to the rank denoted, as soon as there is a vacancy, without any further examination, and also to certain other advantages.

To obtain a Certificate A (Lieutenant's) a member must complete one year's efficient service in the corps, and in the case of Certificate B (Captain's) two years' efficient service, and pass these practical and written examinations, which are held under the auspices of the Imperial and Dominion Governments conjointly, for the whole Empire at the same time. The written papers are set and corrected by military experts in London, England, for the whole Empire.

To be efficient in a given year (1st August to 1st July), a member must have attended 40 parades if in his first year of service, or 25 parades if in a subsequent year, and must have completed the prescribed course of musketry. The time required is about two hours per week each session, and rifle practice is encouraged. For the Session 1923-24 the unit will have its own rifle-range and quarters.

Each member upon joining the contingent will be required to deposit the sum of $5.00 with the Adjutant; for which a receipt will be given. This money will be refunded if the member becomes efficient; otherwise it will go into the funds of the contingent.

The training in the corps is of such a nature that all students are recommended to join. Enlistment is, however, purely voluntary.

Military training is one of the forms of activity recognized as fulfilling the requirements of physical education.

THE SCHOOL OF PHYSICAL EDUCATION.

GENERAL INFORMATION.

History and Aims.

The McGill School of Physical Education was established in 1912, and has grown from a short summer course to a full two years' course which is now officially recognized by, and is an integral part of McGill University.

It is the only School of Physical Education in Canada connected with a University, with a full two years' course, and it has been fulfilling its purpose to provide Canada with a training centre for Teachers of Physical Education, with marked success since its inception.

A course in Massage and Remedial Gymnastics was given in 1914 to train workers for civilian and hospital work; this was amplified later in anticipation of war needs, and graduates of this course have done excellent work in the rehabilitation of wounded soldiers and in civilian practice. A further extension of the course was recently made to include all the Physiotherapeutic Measures, Hydrotherapy, Electrotherapy. This course has been temporarily discontinued.

The modern conception of education is one of intellectual, moral and physical development, and not, as has been too frequently misunderstood, the development of the intellect alone. Physical education, including as it does instruction in the laws of health and hygiene with participation in all forms of physical activity specially selected for the stage of mental and physical development of the child, offers a splendid opportunity for not only increasing the efficiency of the human machine, but also for the development of social and moral qualities in the lives of our future citizens.

The Field.

The field for trained teachers in Physical Education is rapidly increasing and widening in scope, the demand far exceeding the supply in such organizations as the following:—

Public and Private Schools.
High Schools.
Colleges.
Y.M.C.A.'s.
Y.W.C.A.'s.
Church Clubs.
Playgrounds.
Recreation Centres.
Welfare and Social Clubs.
Settlements.
Industrial Organizations
Boy Scouts.
Girl Guides.
Summer Camps, etc.

Qualifications.

In addition to the matriculation requirements, there are certain qualifications necessary for the student who is to become a successful teacher of physical education. Because of the intimate contact with the pupils and the great influence that the teacher can exert, the student must be possessed of high ideals, moral character, noble aspirations, and a forceful personality. She must be able to initiate, organize and control physical activities, and also to counsel and advise upon personal questions with both children and parents. Students must also have had some practical training before entering.

Courses Offered.

A two years course, from September to May inclusive, is given in the theory and practice of physical education. This course is required for the Diploma of the School, and gives the student a thorough understanding of the mechanism of the human machine, its anatomy, physiology and the underlying principles governing the various functions of the mind and body. The student is made familiar with the theory and practice of physical education in its many forms, and, in addition to actual participation in the various activities, there is, before graduation, a considerable amount of time devoted to practice teaching under supervision.

Partial students may be admitted for the study of special subjects. Special arrangements will be made for admission to the course on Playground Problems.

Facilities.

The work is carried on in the University buildings; the laboratories and museums being at the disposal of the students.

The Redpath Library, with approximately 220,000 volumes and pamphlets, is available for use by the students, as are the University Hockey Rinks and Tennis Courts.

A special Library of selected works and the leading magazines on physical education are available for use by the students.

Through the kindness of the Protestant Board of School Commissioners the Day Nursery and the Protestant Orphans' Home, exceptional facilities are afforded for practice teaching and observation.

Clinical work and practical demonstrations are carried on in the Out-Patient Departments of the Royal Victoria and Montreal General Hospitals.

Hostel.

A residence, in charge of a resident tutor, at 724 University Street, in the immediate vicinity of the campus, is conducted by the University and is available for students, provided application is made at an early date. Printed regulations will be supplied to intending students.

Room rent $200.00 for the session; board in the Royal Victoria College (adjacent) $320.00 for the session. Charges for rent and board are paid in two instalments (October and February). Rooms are available from the day before registration until the day after Convocation, for students of the Second Year, and until the Saturday before Convocation for students of the First Year. The board charges cover the same period. No room is assigned for a shorter period than the University session, September to May.

Costume for Women Students.

The regulation costume of the School must be worn, and students will not be permitted to wear other than the regulation garments. Measurement blanks will be furnished upon registration and students will be advised where the costumes can be secured, the approximate cost of tunic, gown and sweater being $40.00 (dancing sandals and shoes extra). A list of articles required, including clothes and books, with approximate cost, will be sent to students on application.

For ordinary wear, students are required to provide themselves with boots or shoes, the inner line of which is moderately straight, with block heels not higher than an inch and a half.

Student Organization.

The students organize their own Association and elect a President, Vice-President, Secretary-Treasurer, and a Manager for each type of athletics.

Alumnae Association.

There is a very active association of the graduates of the School which meets regularly for mutual benefit. It is the endeavour of the School to keep closely in touch with its graduates, to locate them in positions for which they are best suited, to advise upon particular problems, and to furnish them from time to time with new ideas and inspiration for the profession in which they are engaged.

EXAMINATIONS AND PRIZES.

Diplomas.

Examinations will be conducted in all subjects and diplomas granted to successful students at the end of the session.

50 per cent. is required for a pass, 60 per cent. for second class, 75 per cent. for first class; but at least 60 per cent. must be made on teaching and in the major practical subjects.

The Educational Diploma is recognized by the Protestant Committee of the Council of Public Instruction, Province of Quebec, and the Protestant Board of School Commissioners of Montreal as qualifying for the salary of Specialist in the Public Schools.

Students failing in their sessional examinations may, at the discretion of the Committee, take supplemental or special examinations.

Prizes.

1. First Year Prize.—The School offers a prize to the student of the First Year who attains the highest general proficiency in the sessional examinations.

2. Final Year Gold Medal.—The School offers a prize of a gold medal to the student of the graduating year who attains the highest general proficiency throughout the course.

3. A Cup presented by the Class of 1916 is held for one year by the student of the Second Year gaining the highest standing in practical work.

Note.—No student shall be entitled to more than one prize in the final year.

Regulations.

1. All students enter the School on an indeterminate probation. At the end of the first term, students who are considered unsuitable for the profession will be advised to discontinue. $77.00 of the fees paid at the beginning of the course will not in this case be returned.

2. A student may at the discretion of the Committee be requested to withdraw at any time for reasons of unsatisfactory work or conduct.

3. Except in the case of illness or emergency students must not absent themselves without previous permission, and students persistently late or absent will not be allowed to sit for the examinations.

4. No student will be permitted to participate in outside demonstrations, classes or teams, etc., without first having secured permission from the Director.

COURSES OF INSTRUCTION.

(The School reserves the right to change any of the Courses here stated.)

JUNIORS.	Hour.	SENIORS.	Hour.
English	1½	Kinesiology and Applied Anatomy	½
Physics	1	Psychology	1
Chemistry	1	Physiology of Exercise	1
General Anatomy and Physiology	3	Physical Diagnosis	½
Osteology and Myology	1	Remedial Gymnastics	1
Voice Development and Training	½	Anthropometry	½
Theory of Physical Education	1	Preventive Medicine	2
Class Management and Teaching	1	Theory of Physical Education	1
First-Aid	½	Class Management and Teaching	1
Playground Problems	1	Organization and Administration	1
Gymnastics	5	Child Welfare	1
Recreational (Games and Athletics.)	4	History, Physical Education	½
Dancing	2	Gymnastics	3½
Aquatics	1	Recreational (Games and Athletics.)	3
Practice Teaching	2	Dancing	3
		Aquatics	1
		Practice Teaching	3
		Remedial Gymnastics and Massage	1

The hours as stated indicate hours per week throughout the session which consists of thirty weeks.

THEORY

JUNIORS.

English

A course of thirty lectures on English Literature and English Composition. The course in Literature will include a discussion of the various types of literature, poetry, the essay, the short story, the novel and the drama, with illustrations from the great writers of these particular types from Chaucer to Kipling. The course in English Composition will include theory and practice in the use of words, the structure of sentences,

paragraphs and whole compositions and the making of reports, both oral and written.

Conference hours for small groups will be arranged at the convenience of assistants and students.

Dr. Cyrus MacMillan — 1 hour and a half.

Physics.

This course is adapted to problems in physical education, so as to give the students an understanding of the practical applications of physical laws and principles bearing upon their work.

In mechanics the laws and action of simple machines, the laws of forces, of work and energy, of gases, of hydrostatics, of evaporation and related topics are explained and demonstrated. The other subdivisions of the course are dealt with in a similar manner, so that the students may gain a working knowledge of the various branches of physics such as are met with in physical education.

Professor Reilly, Miss V. Henry — 1 hour.

Chemistry.

This course will include the fundamental principles requisite for a knowledge of general chemistry. Stress will be laid upon the chemical interpretation of (a) combustion and its relation to respiration, (b) water purification and sanitation, (c) disinfection, (d) pasteurization. Where possible, trips will be arranged for practical demonstrations of the above lectures.

A series of lectures will be given on the phenonenon of solution in its various phases of neutralization, hydrolysis, electrolysis and osmosis. Compounds met with in ordinary daily routine will be discussed and illustrated with experiments. In conclusion, there will be a brief introduction to organic chemistry of general interest.

Dr. MacLean — 1 hour.

General Anatomy and Physiology.

The purpose of this course is to give the student a clear conception of the human body as a *living mechanism* in which the functions and structure are inseparably related, and in which the activities of all parts are intimately co-ordinated. As far as possible, therefore, the anatomy and physiology of the various organs and systems are considered together.

After an introductory study of the structure of the body as a whole, the great vital phenomena which distinguish all living organisms are considered and a detailed analysis made of the way in which they are exemplified in man.

In this way the various processes which go to make up the life cycle are taken up; the processes of ingestion, digestion, absorption, assimilation, catabolism, respiration, excretion, irritability and conductivity, movement and reproduction—and the structure of the organs concerned in these functions studied.

Professor Simpson 3 hours.

Osteology and Myology.

This course comprises a detailed description of bones, articulation and muscles with special reference to their functions, principles of leverage as applied to muscular action, study of joint movements, surface anatomy, demonstrations with aid of skeleton and models.

Dr. Harvey 1 hour.

Voice Development and Training.

Special exercises and individual practice in breath control, enunciation, articulation, tone projection, ability to control and conserve the voice in giving commands, instruction and in public speaking.

Half-hour.

Theory of Physical Education.

In this course various types and methods of exercise will be studied, *e.g.*, marching, formal, rhythmical, mimetic, hygienic, remedial, corrective, apparatus work, recreational, games, athletics and aquatics. The place in the general plan of physical education and the value of each type will be carefully considered.

A consideration of the choice of various exercises for different types of classes, different ages and different stages of physical and mental development will also be taken up, as well as the adaptation of gymnastics to special conditions, climate, season, special activities, etc.

Dr. Lamb, Miss Cartwright, Miss MacCallum, Miss Wain 1 hour.

Class Management and Teaching.

This course comprises a study of the various methods of grading and selection of material, physiological and psychological progression, teaching, terminology, construction of lessons, etc.

Miss Cartwright, Miss MacCallum, Miss Wain, Mr. Van Wagner, Dr. Lamb 1 hour.

First-Aid.

The endeavour in this course is to give the student a thorough practical knowledge of the correct action to take in cases of emergency.

The treatment of burns, scalds, sprains, dislocations, fractures, shock, hemorrhage, poisoning, etc., also the various kinds and uses of bandages, splints, antiseptics, etc., are carefully considered.

Successful students qualify for the certificate of the St. John Ambulance Association.

Dr. Tees — Half-hour.

Playground Problems.

This course will relate the psychological principles to the actual activities of child life and the types of activity best suited for children of varying ages and development; theories of play, etc.

The various phases of playground activities will be specially considered; individual, group and mass athletics, gymnastics, dancing, games, singing, pageants, festivals, story-telling, hand work, raffia, basketry and kindergarten methods.

Special consideration will be given to playground organization, supplies, equipment and management.

Actual practical work and visits to grounds will be conducted.

Dr. Lamb, Miss Lorna Kerr — 1 hour.

SENIORS.

Kinesiology and Applied Anatomy.

This course will consist of a general review, by means of lectures and demonstrations, of the mechanics of movement of the human machine, also of the classification and analysis of exercise, joint-movements and the action of muscle groups in producing motion.

Dr. Harvey — Half-hour.

Psychology.

A brief outline of general psychology with special reference to relation between mind and body, and some of the more important principles of educational psychology.

Dr. Tait — 1 hour.

Physiology of Exercise.

The object of the course is to study by lectures and practical demonstrations the effects of exercise on the various parts of the body.

The physiological effects of the various types of exercise, muscular contractions and massage; exercises of speed, strength, endurance, skill, static, rythmical and mechanical exercises and their effect upon the neuro-muscular system, metabolism, respiration, circulation, etc.

The work in this course will supplement and apply the problems studied in physiology to the working power of the human machine, and energy, work, overwork, fatigue, second wind, breathlessness, exhaustion, recovery, training, muscular soreness, co-ordination, and tests for organic efficiency will be studied; thereby enabling the student to understand the underlying principles and to use expert judgment in the selection of the best methods of exercise to employ.

Dr. Lamb — 1 hour.

Physical Diagnosis.

Lectures and practical demonstrations in the methods of examination for defects of posture and development, especially of the spine and thorax; description of the deformities due to disease; examination by inspection, palpation, percussion and auscultation; tests for sight, hearing, nasal obstruction; examination for dental defects.

Actual demonstrations will be conducted to enable the students to recognize early contagious infections, the more common defects, and when to seek expert advice. Practice in methods of examination will be carried on under supervision.

Dr. Harvey — Half-hour.

Remedial Gymnastics.

Description of the various postural defects and other abnormalities of development, such as round shoulders, spinal curvature, torticollis, flat feet and their cause.

Lectures, demonstrations and practice in treatment by corrective exercises will be given with special attention to the abnormal conditions found among school children and the preventive measures indicated. A consideration of conditions amenable to treatment by massage will be given in this course. Practical work with individual instruction will be carried out at the clinics of the out-patient department of the Montreal General Hospital.

Dr. Harvey — 1 hour.

Anthropometry.

This course will include the application of measurements and tests to determine the size, state of development and function of the body;

comparative study of types with reference to effect of age, sex, race, occupation and environment; measurements which indicate adaptability for various forms of work or exercise and the relation to vital capacity and endurance; demonstrations of the use of anthropometric instruments for size and bodily proportions, and to determine strength and range of movements; graphic methods of representation illustrated, and the use and method of preparing tables of percentages. Actual practice in the use of the above methods will be conducted throughout the course.

Dr. Harvey — 1 hour.

Preventive Medicine.

The study of Preventive Medicine is taken up under the following heads:—

(a) *Bacteriology and Serology.*

Lectures and demonstrations are given in the study of the more common pathogenic organisms and communicable diseases. Their relation to health is considered in air, water, food, clothing, skin, hair, mouth, etc. Precautions against and means of combatting pathogenic organisms are studied in, e.g., sterilization, disinfection, pasteurization, vaccination, immunization and general prophylaxis.

(b) *Personal Hygiene.*

A consideration of the functions of the body, its environment, the responsibility of the individual and the means by which health is maintained; the care of the body, sleep, bathing, food, clothing, etc., problems in sex hygiene of children, adolescents and social hygiene are discussed.

(c) *Public and School Hygiene.*

Health organizations and the means for the maintenance of health; occupational diseases and the effect of various occupations on health; sanitation, light, heating, ventilation, water supply and drainage, schoolroom inspection, etc.

Dr. Starkey and Miss Cartwright — 1 hour.

Theory of Physical Education.

A continuation of the course outlined for Juniors.

Class Management and Teaching.

A continuation of the course outlined for Juniors.

Organization and Administration.

This course comprises a study of various problems in organization and administration, from arranging a simple schedule of competitive events to the organization and supervision of a Department of Physical Education.

Actual visits to study organizations of various types will be made under supervision.

Athletics: Arrangement of schedules, athletic meets, entry blanks, duties of officials, reports and records of games, group activities, classification of competitors; governing bodies; ethics of sport.

Gymnasium: Construction, equipment and care, locker rooms, swimming pools, municipal baths; office management; correspondence, filing, reports; committees, meetings, purchasing supplies, budget, maintenance and repair.

Public and High Schools, Colleges: Medical examinations and records, prescribed work, elective athletics, credits, penalties, leaders, recess, leagues, intra- and extra- mural activities, health programmes relation to grade teachers, Supervisors, Principal, School Boards, and other schools.

Social Agencies and Organizations: Related forces, Y.M.C.A., Y.W.C.A.; settlements and welfare organizations with voluntary activities.

Summer Camps: Organization, preparation, site, housing, equipment, supervision, activities, trips.

Winter Sports and Carnivals: Ski-ing, snowshoeing, tobogganing, skating.

Dr. Lamb, Mr. Powter — 1 hour.

Child Welfare.

Influences necessary to the normal development of the child in its home, at school, at play, and at work; the treatment of dependent, neglected, delinquent, and defective children; child welfare legislation, organizations, etc. — 1 hour.

History of Physical Education.

This subject covers the history of ancient, mediaeval and modern physical education—the games and athletics of the Greeks and Romans; the decline of the middle ages and the revival during the Renaissance; the various modern systems, the rise and development of play and recreation and the influence of present day methods on the mental and moral condition of the race.

Miss Cartwright — Half-hour.

PHYSICAL PRACTICE.

JUNIORS AND SENIORS.

The practical courses are planned to enable the student to gain not only an adequate knowledge of the numerous activities in physical education, but also to attain a moderate degree of skill in each type and to be able to intelligently teach and direct physical activities.

The student is made thoroughly familiar with the broad underlying principles of practical work and is furnished with ideas and ideals, thereby facilitating the application to any conditions which may arise in the teacher's field of endeavour.

Military and Fancy Marching Tactics:

Methods for handling large and small groups, marching, variations, etc.

Formal and Free Gymnastics—Light and Heavy Apparatus:

Carefully graded exercises including side and long horse, buck, ropes, poles, boom, balancing beams, ladders, rings, horizontal and parallel bars, elephant or box, stall bars, chest weights; dumb-bells, wands, clubs, etc.

Corrective:

Special corrective and posture exercises.

Hygienic:

Exercises producing a maximum of effort in a short time.

Group Activities:

Tumbling, pyramids, etc.

Recreational; Games and Athletics:

The fundamental elements of running, throwing, jumping, climbing, dodging, as they apply to the simple kindergarten games, leading up to the highly organized indoor and outdoor activities for both sexes.

Special subjects in this course may be taken in conjunction with "Playground Problems," thus forming an excellent preparation for those desirous of conducting playground or settlement activities.

Seniors are taught how to coach and judge; rules of competition; how to meet practical problems in the control of games and athletics.

Kindergarten Games	Dancing
Simple games for all ages	Tennis
Captain Ball	Ice Hockey
Dodge Ball	Lacrosse
Volley Ball	Soccer
Basket Ball	Track and Field Athletics
Indoor Base Ball	Winter Sports

Dancing:

This course includes social, folk, national, aesthetic, interpretative and rythmical dancing. Technique and theory are included and students are instructed how to teach dancing as a branch of Physical Education.

Aquatics:

There is an increasing demand for teachers who can specialize in this activity; methods of individual and class instruction of breast, back, side, crawl and trudgeon strokes; diving; life saving, methods of release, rescue and resuscitation; water polo; aquatic meets, etc.

Miss Cartwright, Miss MacCallum, Miss Wain, Dr. Lamb, Mr. Finlay, Mr. Van Wagner, Mr. Powter, Mr. Shaughnessy, Mr. Furey. 14½ hrs.

Practice Teaching.

Great stress is laid on the practice of class teaching in gymnastics, games and dancing. Students are required to submit lessons and then to teach them. In this way timely suggestions and criticisms are offered as experience is being gained in the practical application of the principles of Physical Education.

Students in the Junior year begin by teaching each other, and toward the end of the Session they teach classes in the Day Nursery, the Protestant Orphans' Home, etc. Senior students teach in these institutions at the beginnng of the Session and in the Public Schools of the Protestant Board of School Commissioners during the last three months of the course.

Students are encouraged to take active charge of classes in Club and Settlement work throughout the Seession.

Miss Cartwright, Miss MacCallum, Miss Wain, Mr. Powter. 2½ hours.

Remedial Gymnastics and Massage.

(Seniors only.)

(a) *Active Exercises.*

The classification and practice of movements used for remedial treatment; actual practice in class work and then in the Hospital clinics.

(b) *Passive Exercise and Massage.*

A consideration of the theory and effects of massage with actual practice in the technique of massage manipulations; contra-indications; methods of treating diseases, deformities, fractures, dislocations, sprains, etc.

Dr. Harvey, Mrs. Hay **1 hour.**

THE SCHOOL FOR SOCIAL WORKERS.

FOREWORD AND HISTORY.

There has been a marked growth in recent years of all kinds of social work. The variety of opportunities for service in this field is very great. To those who are interested in human problems it affords a challenging and satisfying vocation. The status of the social worker is secure, for such work is widely recognized as a vital part of community life. The public is spending larger and larger sums of money on social welfare and has a right to expect that those only should be appointed to the work who have made every effort to attain efficiency by careful training.

The Department of Social Service at McGill University grew out of the need for social workers, with a breadth of view and scientific training, for the cities, towns, and open country communities of Quebec and the Maritime Provinces. It aims now, however, to supply the needs of a much wider field. The Department was founded in 1918, under the Principalship of the late Sir William Peterson. At the outset it was aided financially by the Joint Board of Theological Colleges, the Graduates' Society and two private individuals.

During the first four years, the Department was successfully directed by Mr. J. Howard T. Falk, who resigned to become Executive Secretary of the Montreal Council of Social Agencies and of the Financial Federation. He was succeeded by Dr. Carl Addington Dawson as Director of the Department and Assistant Professor of Social Science in McGill University.

EDUCATIONAL AIMS.

The Department offers opportunities for training and education to the following groups:—

1. Those who wish to take up social work as a profession.

2. Volunteer workers who wish to get more knowledge and skill in social work.

3. Workers in service who have not had training in a school of social work, or who have had a limited amount of training.

4. Members of boards and social service committees who want a clearer insight into the matters with which they have to deal.

5. All those who want to realize more fully the social obligations of citizenship. It is a chance and a challenge to contribute to the building of Canadian life on a broader and more enduring social knowledge.

THE FIELD OF SERVICE.

The trained worker may follow his or her profession (practice of social work) in the following fields:—

Family welfare.

Child welfare.

Work with Girls or Boys.

Immigration Workers.

Institutions for the care of Children or of Adults.

Hospital Social Service.

Social Service with Churches.

Probation Officers.

Clubs, Settlements, Community work.

Personnel Management.

Government Departments.

Social Welfare Secretaries.

Employment Bureaus.

Social Research.

Y.W.C.A and Y.M.C.A.

At present the demand for trained men and women in the field of social work is much in advance of the supply.

THE SCIENTIFIC POINT OF VIEW IN SOCIAL WORK.

On the remedial side social work helps to readjust the family, or the individual, to normal conditions of life, but its programme of relief takes into account the causes of mal-adjustment and attempts to eliminate them. There is an increasing number of social agencies whose policy and programme is purely preventive. It is their aim to provide facilities for wholesome personal and social development (broadly covered by community, club, recreational and educational work).

ADMISSION.

Candidates for admission are required to file application on a form supplied by the School. Applications should be made as soon as possible to the Secretary of the School.

Students intending to register must first call at the Office of the School for Social Workers.

DIPLOMA COURSE.—A Junior Matriculation Certificate or its equivalent will be required for admission to the course. Candidates who have failed to complete the matriculation requirements will be allowed to enter the First Year as conditioned students, provided (a) that they have not failed in more than two papers (which cannot both be in the mathematical section, nor in two languages), and (b) that they have obtained at least 25 per cent in the subjects in which they have failed and 50 per cent of the aggregate. This regulation applies also to candidates who seek to satisfy the matriculation requirements by means of certificates granted by other recognized examining bodies. The students will be expected to remove the condition before admission to the Second Year.

CERTIFICATE COURSE.—Students taking the Certificate Course will be required to attend for nine months. Students will be admitted without a Matriculation Certificate if they are able to show evidence of academic standing sufficient to enable them to take the Course with profit to themselves.

PARTIAL STUDENTS.—All lectures in the School for Social Workers are open to Partial students. A statement of standing for courses taken under examination can be obtained from the Director. Examinations are optional.

Graduate nurses with general education equivalent to matriculation standard should take the course successfully. College graduates or persons of equivalent education who have had from three to five years' experience in some other field of work, such as teaching or business, are notably successful in social service studies. Persons under twenty-one years and over thirty-five years of age will only be admitted for exceptional reasons.

STUDENTS AS UNDERGRADUATES IN ARTS.—Those who are too young to enter the School for Social Workers may take all or part of their undergraduate work at McGill, specializing in the field of Social Science and allied Departments. This gives a fundamental background for social work. Following graduation, they may cover the Diploma Course in one year. During the undergraduate years, it is possible to get practical experience in the settlements and clubs in Montreal.

In addition to training, it is the human qualifications such as tact, patience, sympathy, poise, cheerfulness and that something which we may term "religion" and which "calls" a person into social work, that distinguishes the effective from the ineffective. Such may be considered the pre-requisites of an embryo social worker.

REQUIREMENTS FOR A DIPLOMA OR CERTIFICATE.

DIPLOMA COURSE.

(The Diploma Course is covered in two years.)

First Year Courses:

Social Case Work.....2 hrs. per week, sess.
Principles of Physical and Mental Health.....1 hr. " " "
Introduction to the Study of Society.....3 hrs. " " "
Introduction to Psychology.....3 hrs. " " "
Elements of Political Economy.....3 hrs. " " "
Field Work.....1½ days " " "

Second Year Courses:

Advanced Case Work.....1 hr. per week, sess.
Industrial History.....1 hr. " " "
Public Hygiene.....2 hrs. " " "
Child Welfare.....2 hrs. per week, 1st term.
The Community.....3 hrs. " " 1st "
Organization and Administration of Social Agencies.....2 hrs. " " 2nd "
Home Economics.....1 hr. " " 2nd "
Social Pathology.....3 hrs. " " 2nd "
Field Work.....2 days per week, sess.

Alternative Courses:

The Psychology of Play; Playground Supervision and Equipment.....3 hrs. per week, sess.
Hospital Social Service.
Immigration.
Institutional Workers.

A student may proceed to the Second Year with any one full course, or its equivalent, unpassed. A certificate of standing can be given on the satisfactory completion of one year's work.

CERTIFICATE COURSE.

(The Certificate Course is covered in one year.)

Social Case Work.....2 hrs. per week, sess.
Principles of Physical and Mental Health.....1 hr. " " "
Industrial History.....1 hr. " " "
Public Hygiene.....2 hrs. " " "
Psychology.....1 hr. " " "

Child Welfare	2 hrs.	per week,	1st	term.
The Community	3 hrs.	" "	1st	"
Organization and Administration of Social Agencies	2 hrs.	" "	2nd	"
Home Economics	1 hr.	" "	2nd	"
Social Pathology	3 hrs.	" "	2nd	"
Field Work	$1\frac{1}{2}$ days	per week,	sess.	

NOTE:—One alternative will be allowed in the group of courses leading to the Certificate.

The Diploma or Certificate of the School is awarded to students who obtain an average mark of 50% and not less than 40% in any one written examination. Students must also receive satisfactory reports from the social agencies in which their field work has been taken.

Students holding degrees, diplomas or certificates from any recognized University will be given credit for courses which they have covered but the School may require them to take an examination on such subjects.

FIELD WORK.

Too much emphasis cannot be laid on the importance of field work as part of the training of a social worker. The field work during the first term will be taken as far as possible with a family agency. In the second term (or, in the case of a Diploma student in the Second Year) the student will be permitted to choose from one of the several fields which will include work with hospital social service departments, children's agencies, social settlements, etc.

Following the Spring Convocation, students will take two months intensive field work with one of the selected agencies.

Credit for this intensive period will be written in on the student's Certificate or Diploma when it is completed.

TIME REQUIRED.

Students taking the Certificate Course in one year, or the Diploma Course in two years, cannot expect to do the work of the School satisfactorily unless they give their full time to it.

Diploma and Certificate students will be required to attend not less than twelve hours' lecture periods per week, in addition to prescribed laboratory and field work.

Students who for special reasons are not able to follow the regular curriculum of the Certificate or Diploma Course, may, if those reasons appear satisfactory to the Director, be accorded the status of Limited Certificate or Diploma students. Such Limited students may distribute

their work over two years in the Certificate Course, and over four years in the Diploma Course, on the understanding that the sequence and arrangement of courses shall follow the requirements laid down in the regular Certificate and Diploma curricula.

BOARD AND LODGING.

Accommodation for a limited number of out-of-town students can be arranged for at the University Settlement, 179 Dorchester St. West, fifteen minutes' walk from the University. Rates: $10.00 to $15.00 per month for room alone; $35.00 to $40.00 per month for room and board. Residents are required to give one or two evenings a week to helping in the work of the Settlement.

BURSARIES.

A small loan fund is at the disposal of the Committee, from which assistance can be given to a student who would otherwise be unable to take the work of the Department. This sum represents the balance of an anonymous gift of $1,000 for this purpose.

Loans will be repayable on easy terms.

Applications for assistance from this fund should be made as early as possible.

FACILITIES.

Montreal as a Social Work Laboratory.—In Montreal, the student can see a large number of social agencies in operation and can know at first hand how experienced social workers help people to solve their difficulties. It offers a variety of opportunities for the practice of social work under guidance. This is essential to the education of the social worker.

Library.—The School has developed a special library dealing with social problems and social work. These and the other books in the McGill Library are readily accessible.

Lectures.—Apart from the lectures that the student is required to attend, there are many lectures at McGill given by local and visiting professors, eminent public men and others. These are interesting, stimulating and instructive.

Social Life.—Those in the School for Social Workers may participate in the social life of the University through the proposed association of women students.

Athletics.—Athletic exercises in the form of basket ball, tennis, ice hockey, etc., are available. All students desiring to take part in any of these activities, as well as students coming to the University for the first time, are required to present a satisfactory medical certificate.

COURSES OF LECTURES.

I. COURSES IN THE SCHOOL FOR SOCIAL WORKERS.

Social Case Work. Two hours.....Miss Wisdom.

Principles, objective and method of case work, with special emphasis on actual case studies; adequate knowledge as a basis for judgment and action in effecting individual adjustments—how obtained and applied; relief—its place in case work; the relation of case work to the community; records—the use and purpose of records; record making; forms: correspondence, etc.

The aim of the course is to offer a practical basis for constructive and preventive social work through an understanding of methods for studying and meeting social need and malajustment in the individual and in the social groups of which he is a member.

Text-Books: Social Diagnosis, M. E. Richmond; The Social Case History, A. Sheffield; The Family, Bosanquet; Broken Homes, Joanna Colcord.

Advanced Case Work. One hour.....Miss Wisdom.

Principles of Physical and Mental Health. One hour.

(a) The nature of the physical organism; fatigue, rest and exercise; child hygiene; diseases of respiration; heart diseases; tuberculosis; cancer; skin diseases; venereal disease. Dr. A. S. Lamb, Dr. A. B. Chandler, Dr. A. H. Gordon, Dr. J. Roddick Byers, Dr. F. Tees, Dr. Gordon Campbell, Dr. R. E. Powell.

(b) Anatomy and physiology of the nervous system; nervous diseases; definition of fallacious sense perceptions; different types of mental diseases—symptoms, causes and treatment of; mental deficiency; juvenile delinquency; the psychopathic personality; relation of social work to psychiatry; history and case record making.

References: The Measurement of Intelligence, Terman; Outlines of Psychiatry, W. A. White; Mental Deficiency, Mental Hygiene, Tredgold.

In connection with the course, students will have the opportunity to witness clinical examinations and tests at the Psychiatric Clinic, Royal Victoria Hospital.....Dr. Gordon S. Mundie.

Industrial History. One hour.....Associate Professor Hemmeon.

History of the guild, domestic and factory systems; the agricultural and industrial revolutions; modern industrial conditions; history of trade unionism; state socialism, syndicalism and guild socialism; recent developments.

Books for reference: Industrial Democracy, Sydney and Beatrice Webb; Trade Unionism and Labor Problems, F. B. Commons; National Guilds and the State, J. A. Hobson.

Home Economics. One hour, second term.....Miss Philp.

Household management, the dietetic and caloric value of food; economy in buying; economical menus.

Child Welfare. Two hours, First Term.....Lecturer to be appointed.

Influences necessary to the normal development of the child in its home, at school, at play and at work; the treatment of dependent, neglected, delinquent and defective children; the child of the unmarried mother; child-welfare legislation.

Text-Books: Child Placing in Families, Slingerland (Russell Sage Foundation); How Two Hundred Children Live and Learn, Reeder (Noble); Juvenile Courts and Probation, Baldwin and Flexner (Century Co.); Delinquent Child and the Home, Breckenridge and Abbott (Russell Sage Foundation).

Organization and Administration of Social Agencies. Two hours.

Second Term.....Mr. Falk.

Organization; forms of management; responsibilities of a director or trustee; responsibilities of executive secretary; office management; conduct of meetings; charitable accountancy and auditing; financial statements; publicity in social work; financing social agencies; federation in social work.

Public Hygiene. Two hours.....Dr. Macdonald.

The field of preventive medicine; safeguarding water, milk and food supplies; disposal of sewage and refuse; proper methods of ventilating, lighting and heating houses, with special attention to slum property; school hygiene; the prevention of defects, disease dangers, and relation of home conditions to school; industrial hygiene and conditions injurious to the health of workers; infectious diseases and the problem of immunity; governmental regulation and inspection; public health movements and agencies.

Hospital Social Service.

An analysis and presentation of the problems that fall particularly in the field of hospital social service and the application of suitable case-work methods.

(Lecturer to be appointed and course given when the demand for it is sufficient.)

II. COURSES IN THE SCHOOL OF PHYSICAL EDUCATION.

Psychology. One hour.....Mr. DeSilva.

A brief outline of general psychology with special reference to relation between mind and body, and some of the more important principles of educational psychology.

The Psychology of Play: Playground Supervision and Equipment.

Students intending to enter the Social Settlement field will be required to take this course.

Consideration will be given to the principles underlying the play life of the child; classes in folk dancing, and games for all ages.

III. COURSES IN THE FACULTY OF ARTS.

Introduction to the Study of Society. (Social Science 1.)

Three hours.....Assistant Professor Dawson.

Human nature; society and group; isolation and contact; the nature and effects of communication; social forces; competition and the location of the individual in the community; war, racial and cultural conflicts; social control; collective behaviour; social progress.

Introduction to the Science of Sociology, Park and Burgess.

The Community—a Study of Rural and Urban Life. (Social Science 2.)

Three hours.....Assistant Professor Dawson.

Methods of studying the community; social anatomy; a comparative study of communities and their fundamental nature; analysis of the underlying forces of the social processes which make for natural groups and institutions (to meet needs: industrial, leisure time, religious, educational, governmental, social agencies); disorganization and reorganization in modern communities; community culture.

Social Pathology. (Social Science 3.)

Three hours, Second Term.....Assistant Professor Dawson.

Statistical and other methods of research; dependency (including poverty); defectiveness; degeneracy; social variation; social unrest and disorder; pathology of play and amusements; crime, delinquency, the gang; family disorganization, desertion; tendencies in the direction of social reorganization. Supplemented by field trips, individual and group studies.

Immigration. (Social Science 4.).....Assistant Professor Dawson.

Social, industrial and political phases of the immigration problem; types of migration and immigration; present sources for Canadian immigration; immigration laws and policies; assimilation and Canadianization.

Introduction to Psychology. (Philosophy 1.) Three hours.
Associate Professor Tait.

Lectures, class experiments and exercises.

Elements of Political Economy. (Economics 1.) Three hours.
Professor Leacock and Associate Professor Hemmeon.

EXTENSION LECTURES.

The School arranges Extension Courses of evening lectures, which are given by the Staff, by lecturers from other universities, and by persons who occupy positions of social leadership. These are open to the public upon payment of a small fee. They take up for the larger public the meaning of social work and a popular presentation of various social problems. The series for 1922-23 was as follows: "The City at the Cross-Roads," "The Family as Main Street Sees It." "The Under-privileged Boy and Girl," "The Story of the City Milk Supply," "The Handicapped," "Human Relations in Industry," "The New Canadian Immigration," "The Legislator and the Child."

The School is ready to arrange special series of popular lecture courses in the social field for churches, schools, social agency boards, social service committees, community, neighbourhood and other groups. It is also ready to arrange social clinics for interested groups.

THE SCHOOL FOR GRADUATE NURSES.

GENERAL STATEMENT.

The establishment of the School for Graduate Nurses was made possible by the generosity of the Quebec Provincial Red Cross Society, which agreed to finance the undertaking for three years.

The School was opened in October, 1920, with a twofold object: (1) To provide training for Public Health Nursing; (2) To provide training for administrative and teaching positions in Hospitals and Schools of Nursing. Two courses, A and B, were therefore arranged, each covering a full academic year and leading to a certificate. Seven full-time students were registered in Course A and nine in Course B. In addition, 18 partial students were registered for one or more courses. Thirteen of the full-time students completed the course and received their certificates. They are doing good work in various important positions.

The second year of the School showed encouraging progress. A third course (Course C) was added, to provide training for admininstrative positions, etc., and the work in Course B was arranged especially for those preparing to hold positions as instructors in schools of nursing. There were twenty-two full-time students, of whom eight were registered in Course A (Public Health Nursing); ten in Course B (Teaching in Schools of Nursing); and four in Course C (Administration in Schools of Nursing).

The third year opened with fewer full-time students. Eight registered in Course A (Public Health Nursing), and four in Course C (Administration in Schools of Nursing). There has been, however, a very large increase in the number of partial students, forty-five having registered for lectures in one or more of the courses open to extension students. These students were nurses employed in public health nursing with the Victorian Order of Nurses, the Metropolitan Life Insurance Co., the Child Welfare Association; or on the staff of the local hospitals—the Royal Victoria, the Montreal General, the Western General, and the Homeopathic Hospital.

AIMS OF THE DEPARTMENT.

The courses offered in the School for Graduate Nurses are designed to prepare qualified nurses to act as instructors, supervisors, assistants and superintendents in training schools for nurses; as superintendents of small hospitals; and as public health nurses. The hope and aim of the School is to send out teachers and leaders, who, whether by helping to improve the methods and raise the standards of nursing education in Canada, or by doing efficient work in the varied fields of public health nursing, may alike serve the community as health workers.

"Superintendents, supervisors, instructors, and public health nurses should in all cases receive special additional training beyond the basic nursing course." (Conclusion 7, Report of the Committee on Nursing Education, Rockefeller Survey.)

COURSES OFFERED IN THE SCHOOL FOR GRADUATE NURSES.

A.—Public Health Nursing.

This branch of nursing is developing all over Canada. The field of Public Health Nursing is ever widening, the interest of such work is beyond question, and the need of qualified workers is very great. In addition to visiting nursing, which is the oldest branch of this work, there are school nursing, infant welfare work, industrial nursing and social and mental hygiene work and many other activities, all concerned with the prevention of disease and the promotion of better standards of health.

The nursing education and experience given in the majority of training schools for nurses are not sufficient to meet these new demands. Public health nursing is largely preventive, social, and educational in character, while the training given has been chiefly of a remedial nature.

Extract from Conclusion I of the Report of the Committee on Nursing Education, Rockefeller Survey:—"That as soon as may be practicable all agencies, public or private, employing public health nurses, should require as a pre-requisite for employment the basic hospital training, followed by a post-graduate course, including both class work and field work, in public health nursing."

PROGRAMME OF STUDY.

The following programme is planned to give a fundamental preparation for generalized or special forms of public health nursing:—

Required:—

Principles of Public Health Nursing.
Special Health Problems and Special Fields of Public Health Nursing.
Preventive Medicine.
Bacteriology.
Child Hygiene.
Control of Communicable Disease.
Neuro-Psychiatry.
Elementary Psychology.
Principles of Teaching.
History of Nursing.
Nutrition.
Social Case Work.
Field Work in Public Health Nursing.

Electives:—Social Psychology, Home Economics, Chemistry, Industrial History, Child Welfare, Physical Diagnosis, Introduction to the Study of Society, The Community, Social Pathology.

B.—Teaching in Schools of Nursing.

The need of qualified instructors for Schools of Nursing is being very generally realized as the necessity for improved educational methods in the training of nurses becomes increasingly apparent. The demand for such instructors is, however, in excess of the supply.

PROGRAMME OF STUDY

Required:—

Elementary Psychology.
Principles of Teaching.
History of Education.
Teaching in Schools of Nursing.
Supervision in Schools of Nursing.
History of Nursing.
Preventive Medicine.
Bacteriology.

Electives:—Physics, Chemistry, Materia Medica, Nutrition, Anatomy and Physiology, Neuro-Psychiatry, Educational Psychology, Abnormal Psychology, Social Psychology, Introduction to the Study of Society.

C.—Administration in Schools of Nursing.

This course is planned to prepare experienced women of superior qualifications for positions as superintendents in Schools of Nursing, or as superintendents of small hospitals.

PROGRAMME OF STUDY.

Required:—

Administration in Schools of Nursing.
Hospital Administration.
Current Problems in the Education of Nurses.
Supervision in Schools of Nursing.
Elementary Psychology.
Principles of Teaching.
History of Nursing.
Preventive Medicine.
Nutrition.

Electives:—Abnormal Psychology, Neuro-Psychiatry, Bacteriology, Home Economics, Introduction to the Study of Society, Control of Communicable Disease.

Students completing the requirements of both courses B and C are entitled to a certificate in Teaching and Administration in Schools of

Nursing; or courses B and C, with electives, can be taken as a two-year course leading to a diploma in Teaching and Administration in Schools of Nursing.

REQUIREMENTS FOR CERTIFICATES OR DIPLOMAS.

A certificate course requires fourteen hours weekly or the equivalent. (Two hours laboratory or four hours field work equals one hour lecture.)

Certificates are awarded to students who obtain an average mark of 50 per cent in all examinations and not less than 40% in any one written examination.

In the case of students who do field work, satisfactory reports must also be received from the agencies with which their field work has been taken.

The diploma of the School for Graduate Nurses is awarded to students on the satisfactory completion of a two-year course in teaching and administration. (See Courses B and C.)

EXAMINATIONS

Examinations are held in some subjects at the end of the first term and final examinations are held in May. The School closes at the end of May.

ADMISSION REQUIREMENTS, REGISTRATION, SCHOLARSHIPS AND FEES.

ADMISSION REQUIREMENTS.

Nurses desiring to enter for any course given in the School for Graduate Nurses must present:—(a) Evidence of a complete high school education or of an equivalent which is adequate to the requirements of the University; (b) evidence of the satisfactory completion of a course in a Nurses' Training School of approved standards connected with a hospital of at least fifty beds and covering a complete general training of at least two years. Nurses must be registered when coming from the State or Province where registration is in force, and must be eligible for membership in the Canadian National Association for Trained Nurses.

In addition to the above, any nurse wishing to take the course in Administration in Schools of Nursing must present definite evidence that, after graduation, she has held satisfactorily, for a reasonable period of time, a position which has demonstrated her fitness for responsible executive work of this kind.

As the work demands continued and concentrated effort, students must be in good physical condition, and must present a medical certificate to that effect.

Partial Students:—Qualified nurses may register for one or more courses in any term, with the consent of the Director.

All students entering the University for the first time are required to present a certificate, or other satisfactory evidence of successful vaccination, failing which, they shall at once be vaccinated in a manner satisfactory to the authorities.

Application for admission should be made during the spring and early summer, if possible. For application blanks and further information, write to the Director, School for Graduate Nurses, McGill University.

REGISTRATION AND RESIDENCE.

Registration begins September 20th, and the opening lecture will take place Monday, October 1st. Nurses will consult the Director at time of registration.

A limited number of students may be accommodated at the Hostel of the Department of Physical Education. Hostel students have their meals at the Royal Victoria College, which is in the vicinity. Addresses of boarding houses may be had from the Director.

SCHOLARSHIPS.

Scholarships are being offered for 1923-24 by the Association of Registered Nurses of the Province of Quebec, and a number of hospitals are providing annual scholarships for their own graduates. Among these

are the Royal Victoria Hospital, Montreal General Hospital, Hamilton General Hospital, Hospital for Sick Children, Toronto, Jeffrey Hale's Hospital, Quebec.

The Victorian Order of Nurses for Canada offers scholarships of $400.00 each to graduate nurses who wish to avail themselves of a post-graduate course in public health nursing at the Universities of Vancouver, B.C., Toronto and London, Ont., McGill, Montreal, Que., and Dalhousie, Halifax. Nurses accepting scholarships will be expected to remain in the service of the Victorian Order for one year upon successful completion of the course, at prevailing salaries.

FEES AND DEPOSITS.

The fee for any certificate course is $100.00 a year (including the use of the Library), to be paid by October 10th, or payable in two instalments of $51.00 each, to be paid by October 10th and February 1st.

Partial Students:—Fee at the rate of $7.00 for an hour of instruction a week during the academic year; library fee of $4.00; special fee for courses which include Laboratory work.

Regular students, as in all departments of the University, pay in addition a $3.00 athletics fee.

A deposit of $5.00 caution money is required from regular students.

EXPENSES

A statement of average expenses for the academic years is as follows:—

University fees	$103.00		
Books	20.00	to	$ 40.00
Rooms (30-32 weeks)	175.00	"	225.00
Board	225.00	"	300.00
Incidentals	30.00	"	40.00
Average total	550.00	"	700.00

COURSES OF LECTURES.

1. **Supervision in Hospitals and Training Schools.**

Lectures, Conferences and Excursions:—Course designed for teachers and supervisors who require a general knowledge of organization and administration in hospitals and training schools. It deals with the relation of departments to each other, and with the ordinary problems of management of practical training of student nurses, and the preparation of ward records and reports.

One hour.....Miss Shaw and Miss Samuel.

2. **Principles of Hospital Administration.**

Lectures and Observations:—The particular problems of hospital administration and housekeeping, the furnishing and equipment of wards and other departments; organization of service in each; duties, salaries and conditions of life and work; province and duties of heads of kitchens, laundries, linen and supply rooms, and the handling of goods, linen, household and surgical supplies.

One hour, 2nd term.....Dr. Haywood.

2a. **Round Table Conference on Hospital Administration.**

One hour, 2nd term.....Miss Shaw.

3. **Administration in Schools of Nursing.**

Lectures and Conferences:—This course deals with the problems of training school organization in connection with hospitals of various types or under other forms of government. It deals with the general problem of training school management; the qualifications, personality, and training of superintendent or principal; her general duties and responsibilities on the administrative side; the arrangement, control, and supervision of practical work, in wards or other hospital departments; the appointment and direction of assistants and ward staff.

Two hours.....Miss Shaw and Miss Samuel.

4. **Administration in Hospitals and Schools of Nursing.**

Excursions and field work.

Two hours, 2nd term.....

5. **Teaching in Schools of Nursing.**

Lectures and conferences:—This course deals primarily with the curriculum of the nursing school, outlining the aims to be achieved through the course of study, the selection and arrangement of subjects in the curriculum, the general content of each, the special methods of teaching suitable in the various subjects, the selection and use of text and reference books, and other teaching materials.

Two hours.....Miss Shaw.

5a. **Teaching in Schools of Nursing—Observation and Practice Teaching.**
One hour, 2nd term.....

6. **Current Problems in the Education of Nurses.**
Lectures, Readings:—This course deals with special problems in education peculiar to training schools for nurses. Questions of standardization, health and social aspects of student life, affiliations, etc., are considered.
One hour, 2nd term.....Miss Shaw.

7. **Principles of Public Health Nursing.**
(a) Lectures, Recitations. (b) Excursions and Conferences:—Intended to give a general grasp of the nursing problems to be met with in private families; the measures to be followed to relieve immediate needs; and to teach hygiene, preventive methods, and the handling in the home of acute, chronic, or communicable disease. The organization and supervision of the various types of public health nursing are also considered.
Two hours.....Miss Smellie.
(c) History of Public Health Nursing.
One hour.....Miss Shaw.

8. **Special Health Problems and Special Fields of Public Health Nursing.**
School nursing, pre-natal, maternity, industrial, and other special types of public health work are considered.
One hour.....Special lecturers.

9. **History of Nursing.**
Illustrated Lectures, Reading:—Deals with the origin and historical development of nursing under monastic, military and secular control—Florence Nightingale, her successors, modern nursing in various countries—nursing in the Great War—Red Cross activities—nursing organizations—registration—state regulation.
One hour.....Dr. Abbott and Miss Shaw.

10. **Materia Medica.**
Lectures and Demonstrations:—This course includes a discussion of drugs, their sources, crude forms, and preparation, with laboratory demonstrations; proper methods of administration, with physiological, therapeutic and toxic action; their dosage, cost and care; practical problems in weights and measures, and in the preparation of solutions.
One hour.....Mr. A. B. J. Moore.

11. **General Anatomy and Physiology.**
The purpose of this course is to give the student a clear conception of the human body as a *living mechanism*, in which the function and struc-

ture are inseparably related, and in which the activities of all parts are intimately co-ordinated. As far as possible, therefore, the anatomy and physiology of the various organs and systems are considered together.

After an introductory study of the structure of the body, as a whole, the great vital phenomena which distinguish all living organisms are considered and a detailed analysis made of the way in which they are exemplified in man.

In this way the various processes which go to make up the life cycle are taken up: the processes of indigestion, digestion, absorption, assimilation, catabolism, respiration, excretion, irritability and conductivity, movement and reproduction—and the structure of the organs concerned in these functions.

Three hours' lectures and demonstrations.....Prof. Simpson.

12. **Nutrition and Cookery.**

Lectures, Recitations and Demonstrations—elements of nutrition and dietetics:—This course describes very simply the essentials of an adequate diet, and the nutritive properties of common food materials. The application of such knowledge to the feeding of individuals and family groups is discussed, with special reference to limitations of cost. Estimations of food values and preparation and service of practical dietaries constitute the laboratory work.

Two hours.....Miss Cruise.

13. **Preventive Medicine.**

Two hours.....Dr. Starkey.

The study of Preventive Medicine is taken up under the following heads:—

(a) *Bacteriology and Serology.*

Lectures in the study of the more common pathogenic organisms and communicable diseases. Their relation to health is considered in air, water, food, clothing, skin, hair, mouth, etc. Precautions against and means of combating pathogenic organisms are studied in, *e.g.*, sterilization, disinfection, pasteurization, vaccination, immunization and general prophylaxis.

(b) *Bacteriology—Laboratory work.*

Two hours.....Dr. Macdonald and Dr. Jones.

Classes and laboratory work.—Use of microscope, moulds, yeasts, bacteria, media, bacteria and diseases, bacteriology of milk and water; defences of the body against pathogenic bacteria; applications of bacteriology.

(c) *Personal Hygiene.*

A consideration of the functions of the body, its environment, the responsibility of the individual and the means by which health is maintained; the care of the body, sleep, bathing, food, clothing, etc.

(d) *Public and School Hygiene.*

Health organizations and the means for the maintenance of health; occupational diseases and the effect of various occupations on health; sanitation, light, heating, ventilation, water supply and drainage, school room inspection, etc.

(e) *Vital Statistics.*

14. Child Hygiene.

Principles of pre-natal care; prevention of blindness; importance of breast feeding; infant welfare clinics; the pre-school age child; detection of physical defects; oral hygiene; child welfare and health centre work.

One hour, 1st term.....Dr. Chandler.

15. Control of Communicable Disease.

Lectures, Clinics and Excursions:—The course designed for nurses in public health work, deals with methods of applying modern scientific medical knowledge in the prevention of disease. It considers the causes of prevalent communicable disease, such as tuberculosis, typhoid fever, scarlet fever, diphtheria, and the venereal diseases; measures for prevention and methods of control and care.

One hour.....Dr. Byers, Dr. Cushing, and special lecturers.

16. Neuro-Psychiatry and Mental Hygiene.

Definitions of fallacious sense perceptions, such as hallucinations, illusions, delusions, different types of mental diseases, symptoms, causes and treatment of; mental deficiency; epilepsy; differential diagnosis of organic and functional nervous diseases; juvenile delinquency; the psychopathic personality; relation of psychiatry to industry; relation of social work to psychiatry; history and case record making.

One hour.....Dr. Mundie.

17. Principles of Teaching.

The aims of education for the individual, society, nursing schools; when and how do pupils really learn?; education as habit formation; the training of memory; how can we test the progress of learning?; how do pupils get hold of new ideas?; how can we get our pupils to pay attention?; how can we get vivid impressions on our pupils' minds?; the fine art of questioning; how to make a lesson plan; types of teaching; what part can other pupils play in teaching?

One hour.....Dr. Best.

18. History of Education.

The purpose of the course is to present the essential features of the educational thought of the past as this has been shaped by economic, social, political and religious causes.

Two hours, 2nd term.....Dr. Best.

19. Field Work in Public Health Nursing.

Excursions, Observations and Practice Work:—This work is arranged with various health organizations as follows:—

(a) Hospital social service, in the Social Service Departments of the Royal Victoria Hospital, Montreal General Hospital, Children's Memorial Hospital, and Western Hospital.

(b) School nursing with the city school nurses, by courtesy of the Department of Health.

(c) Child welfare work with the settlements, baby welfare stations, dispensaries, etc.

Four hours.....

20. Visiting nursing with the local branch of the Victorian Order of Nurses.

One month on completion of academic year. Credit for field work allowed in certain cases.

For this work it will be necessary for each student to provide herself with a wash dress, long coat, and plain hat.

COURSES GIVEN IN THE FACULTY OF ARTS.

Introduction to the Study of Society.

Human nature; society and the group; isolation and contact; the nature and effects of communication; social forces; competition and the location of the individual in the community; war, racial and cultural conflicts; social control; collective behaviour; social progress.

Three hours.....Assistant Professor Dawson.

The Community: a study of rural and urban life.

Methods of studying the community; social anatomy; a comparative study of communities and their fundamental nature; analysis of the underlying forces of the social process which makes for natural groups and institutions (to meet needs—industrial, leisure time, religious, educational, governmental, social agencies); disorganization and re-organization in modern communities; community culture.

Three hours.....Assistant Professor Dawson.

Social Pathology.

Statistical and other matters of research; dependency (including poverty); defectiveness; degeneracy; social variation; social unrest and disorder; pathology of play and amusements; crime, delinquency, the gang; family disorganization—desertion; tendencies in the direction of social reorganization. Supplemented by field trips, individual and group studies.

Three hours, 2nd term.....Assistant Professor Dawson.

Elementary Psychology.

Lectures, Recitations and Exercises.

Three hours.....Associate Professor Tait.

Social Psychology.

Lectures, Prescribed Readings and Reports.

Three hours.....

Abnormal Psychology.

As in Fourth Year Medicine.

Two hours.....

Educational Psychology.

Three hours.....Associate Professor Tait.

COURSES GIVEN IN THE SCHOOL OF PHYSICAL EDUCATION.

Psychology.

A brief outline of general psychology with special reference to relation between mind and body, and some of the more important principles of educational psychology.

One hour.....

Physical Diagnosis.

Lectures and practical demonstrations in the methods of examination for defects of posture and development, especially of the spine and thorax. Description of the deformities due to disease. Examination by inspection, palpation, percussion, auscultation by use of the stethoscope to determine the condition of the heart and lungs. Tests for sight, hearing, nasal obstruction. Examination for dental defects, enlarged tonsils and adenoids.

One hour, 2nd term.....Dr. Harvey.

Chemistry.

Matter, physical and chemical changes. elements, compounds, mixtures, phenomena of combustion, respiration.

Oxygen, hydrogen; water and laws of chemical combination; valence, chemical equations and calculations; gas laws; diffusion, atomic and molecular theories; nitrogen and compounds; composition of the atmosphere.

Solutions; acids, bases, salts, and neutralization; hydrolysis, theory of solution, electrolysis, osmosis; halogens and compounds; sulphur and compounds; carbon and compounds; phosphorus, arsenic and antimony; metals and non-metals. In addition to the above there will be included the chemistry of compounds met with in ordinary daily routine.

A series of lectures will be given on Organic Chemistry embracing types of homologous series of compounds, and alcohols, aldehydes, ethers, acids, esters, fats, soaps, amines, amino acids, protein, carbohydrates, alkaloids, oxidations and reductions in the animal body, etc.

One hour.....Dr. MacLean.

COURSES GIVEN IN THE SCHOOL FOR SOCIAL WORKERS.

Industrial History.

History of the guild, domestic and factory systems; the agricultural and industrial revolutions; modern industrial conditions; history of trade unionism; state socialism, syndicalism and guild socialism; recent developments.

One hour.....Associate Professor Hemmeon

Home Economics.

Household management, the dietetic and caloric value of food; economy in buying; economical menus.

One hour, 2nd term.....Miss Philp.

Social Case Work.

Principles, objective and method of case work, with special emphasis on actual case studies. Adequate knowledge as a basis for judgment and action in effecting individual adjustments; how obtained and applied. Relief; its place in case work. The relation of case work to the community. Records; the use and purpose of records; record making; forms; correspondence, etc.

Two hours.....Miss Wisdom.

Child Welfare.

Influences necessary to the normal development of the child in its home, at school, at play and at work; the treatment of dependent, neglected, delinquent and defective children; the child of the unmarried mother; child-welfare legislation.

Two hours, 1st term.....Lecturer to be appointed.

THE UNIVERSITY LIBRARY.

G. R. Lomer, M.A., Ph.D., Librarian.

The University Library is under the general management of a Committee of Corporation, consisting of the Principal, Chairman; the Librarian, Secretary; two members of the Board of Governors, one Representative Fellow, appointed by Corporation; two representatives of the Faculty of Arts, elected by the Faculty; one representative of each of the Faculties of Applied Science, Law and Medicine, elected by their respective Faculties; and four other members appointed by Corporation.

The several libraries of the University now contain over 180,000 volumes and 31,000 pamphlets, considerable collections of maps and photographs, and a number of the rarer and more costly monographs and serials which are indispensable for purposes of research. The Library now receives over 1,100 periodicals, Government publications and transactions of various literary and scientific societies.

Among the special collections possessed by the Library may be mentioned the Mendelssohn Choir Memorial Collection of works on Music, the T. D. King Collection of Shakespeariana, the Redpath Historical Collection, and the Collection of Canadiana. The nucleus of the latter is formed by the choice library of the late Mr. Frederick Griffin, which he bequeathed to the University about forty years ago. It has been growing ever since, and includes, at the present time, besides numerous manuscripts, an interesting collection of Canadian portraits and autographs, recently increased by a gift from Mr. George Iles. The Canadiana have been further enriched by the recent gift of over 270 volumes and 50 pamphlets from the library of the late Mr. William McLennan, presented in his memory by his children. The library now has an extensive collection of bookplates in process of being classified and mounted.

The Redpath Historical Collection was begun by the late Mr. Peter Redpath soon after he became a Governor of the University. It received substantial yearly additions from him up to the year of his death, after which it was steadily augmented by his widow during the remainder of her life. It is now large and valuable, and affords excellent opportunities for the study of history. Its most striking feature—a series of political, religious and social tracts, for which the first selections were made by the late Professor Henry Morley—was greatly enriched by the late Mrs. Redpath and at the present comprises about 10,000 brochures, dating from 1600 A.D. to the end of the nineteenth century.

A special Architectural collection, known as the "Blackader Library of Architecture," has been established in honour of Captain Gordon Home Blackader, B.Arch. (McGill), who was wounded near Ypres on June 2nd, 1916, and died in London on August 20th of the same year.

"The Emma Shearer Wood Library of Ornithology" was presented by Colonel Casey A. Wood, M.D., as a special research collection and reference library rich in periodical and pamphlet materials, for use by all who are interested in birds.

"The Blacker Library of Zoology" is being presented by Robert Roe Blacker and Nellie Canfield Blacker as a comprehensive reference library on this special subject. In addition to standard works it includes a number of monographs and an extensive collection of reports of scientific voyages and periodicals.

These three collections are now housed in the recently completed addition to the library and are provided in each case with a reading-room adjacent to the new steel stacks which are devoted to these special libraries.

The Barnes Collection of books on Physics is shelved with the Departmental Library in the Physics Building. The School of Commerce, the School for Graduate Nurses and the Department of Social Service are beginning to make collections of books on their special subjects.

Founded in 1900, as a memorial to the late Mr. Hugh McLennan from his children, the Travelling Libraries of McGill University were endowed in 1911 by their founders. These libraries contain, each, from thirty to forty carefully selected volumes; and are sent, on application, and on payment of a nominal fee of $4.00, to schools, to country libraries, to reading clubs, and to small communities which possess no public library. Pictures, lantern slides and lectures are also supplied by this department. Regulations and full particulars may be obtained from the Librarian of the University. Provision has also been made to supply books by mail to graduates of the affiliated theological colleges and to ministers who have not the advantage of local libraries.

Although the Library is maintained primarily for members of the University, the Corporation has provided for admission, upon certain conditions, of such persons as may be approved by the Library Committee. It is the desire of the Committee to make the Library as useful to the entire community as is consistent with the safety of the books and the general interests of the University.

The Library serves also as a general reference library for Montreal and has been of service in this capacity to institutions, learned societies, business houses, railways, corporations, and industrial societies. It also has a system of inter-library loans by which it sends books to other libraries and obtains for the teaching staff works not available here.

With the Library are affiliated the McGill College Book Club and the University Book Club, which supply their readers with standard, important and recent publications and make a substantial annual contribution of books to the Library.

EXTRACTS FROM THE LIBRARY REGULATIONS.

1. The University Library is closed on Sundays, and on certain other holidays, as noted in the *Calendar of Meetings*. With a few exceptions: which are posted in the Library at the appropriate time, it is open as follows,

(a) During the session, from 9 a.m. till 6 p.m. and from 7 till 10 p.m. On Saturdays from 9 a.m. till 5 p.m.

(b) During vacation, from 9 a.m. till 5 p.m. On Saturdays, from 9 a.m. till 1 p.m., except during July and August, when the Library is closed on Saturdays.

2. Students in the Faculties of Arts, Law, and Applied Science are entitled to read in the Library, and may borrow books (subject to the regulations) to the number of three volumes at one time.

3. Students in the Faculty of Medicine, who have paid the Library fee to the Bursar, may also read in the University Library, and on depositing the sum of $5, may borrow books on the same conditions as students in other faculties.

4. Graduates in any of the faculties, on making a deposit of $5, are entitled to the use of the Library, subject to the same rules and conditions as students in Arts, Law or Applied Science.

5. Books may be taken from the Library only after they have been charged at the delivery desk; borrowers who cannot attend personally must sign and date an order, giving the titles of the books desired.

6. Books shelved in the reading-rooms or seminary-rooms must not be taken from the rooms to which they have been assigned; and, after they have been used, they must be returned promptly by readers to their proper places upon the shelves.

7. Before leaving the Library, readers must return to the attendant at the delivery desk books which they have drawn from the stack for use in the readirg-room.

8. All persons using books remain responsible for them so long as the books are charged to them, and borrowers returning books must see that their receipt is properly cancelled.

9. Writing or making any mark upon any book belonging to the Library is unconditionally forbidden. Any person found guilty of wilfully damaging any book in any way shall be excluded from the Library and shall be debarred from the use thereof for such time as the Library Committee may determine.

10. Damage to or loss of any books, maps, or plates, and injury of library fixtures, must be made good to the satisfaction of the Librarian and the Library Committee.

Damage, loss or injury, when the responsibility cannot be traced, will be made good out of the caution money deposited by the students with the Bursar.

11. Should any borrower fail to return a book upon the date when its return is due, he may be notified by postal card, and requested to return the book. If the time has not been extended, or the book returned, after a further delay of at most three days, the book may be sent for by special messenger, at the borrower's expense, or may be replaced, and paid for, in the case of a student, out of the caution monies of such student; in the case of graduates or other borrowers, out of their library deposits. A fine of five cents for ordinary books and of twenty-five cents for reference books is imposed for each day that a book is overdue.

12. Before the close of each session, students must return uninjured, or replace to the satisfaction of the Librarian, all books which they have borrowed.

13. Silence must be strictly observed in the Library.

14. Infringement of any of the rules of the Library will subject the offender to a suspension of his privileges, or to such other penalty as the nature of the case may require.

LIBRARY FEES.

The Library fee for undergraduate students in the Faculties of Arts, Applied Science and Law is included in the University fees. The fee for partial students is $4.00. Graduates, extension course students, and medical students using the University Library must make a deposit of $5.00 at the Bursar's Office. The fees for members of the McGill College Book Club and the University Book Club are payable to their respective treasurers. Individuals not belonging to any of the above groups may use the Reading Room without charge, but should apply to the Library Committee, through the Librarian, for permission to take books from the building.

MACDONALD COLLEGE.

FOUNDATION AND PURPOSE.

Macdonald College, which is incorporated with McGill University was founded, erected, equipped and endowed by the late Sir William C. Macdonald for the following among other purposes:—

(1) The advancement of education; the carrying on of research work and investigation and the dissemination of knowledge; all with particular regard to the interests and needs of the population in rural districts.

(2) To provide suitable and effective training for teachers, and especially for those whose work will directly affect education in schools in rural districts.

SITUATION AND EXTENT.

The College occupies a beautiful site, overlooking the Ottawa River at Ste. Anne de Bellevue, P.Q., twenty miles west of Montreal. The main lines of the Grand Trunk and the Canadian Pacific railways pass through the property, and the stations of both railways are within its boundaries.

The College property comprises 786 acres, and has been arranged into four main areas, viz.: (1) the campus, with lawn, school garden, and recreation fields for men and women; (2) experimental grounds, with plots for illustration and research in grains, grasses, and other farm crops; (3) the horticultural and poultry departments; and (4) the stock farm.

THE GENERAL ORGANIZATION.

The College is divided into three schools:—

(1) **The School of Agriculture**, which aims to provide a theoretical and practical training in the several branches of agriculture.

(2) **The School for Teachers**, which offers a comprehensive and thoroughly practical training in the art and science of teaching.

(3) **The School of Household Science**, in which young women receive training which will make for the improvement and greater enjoyment of home life and instructs them in professional work in household and institute superintendence and management.

ENTRANCE REQUIREMENTS.

School of Agriculture.

See pages 55 and 56 to 68.

School for Teachers.

Teachers to be trained for the schools under the control of the Protestant Committee of the Council of Public Instruction for the Province of Quebec will be admitted under conditions prescribed by that body, particulars concerning which are given in detail in the Announcement of Macdonald College.

School of Household Science.

All candidates for admission:—

1. (a) To the homemaker course, must have entered their eighteenth year and completed grade VII. of the Province of Quebec, or its equivalent.

(b) To the institution administration course, must have entered their twenty-first year, completed grade XI. (school leaving) of the Province of Quebec, or its equivalent, and have had some previous experience in housekeeping (*e.g.*, assisting with the housekeeping in their own homes).

(c) To the short courses, must have entered their eighteenth year, be able to read and write the English language acceptably and be proficient in the use of elementary mathematics.

2. Must produce satisfactory evidence as to moral character; also medical certificate of health, including successful vaccination within the six years preceding date of entrance.

PAYMENTS AT ENTRANCE

	Tuition per Session	Laboratory Fee	Caution Money Deposit	4 Weeks' Board in Adv.(a)	Doctor's Fee	Laundry Fee	Student Activities	Total
SCHOOL OF AGRICULTURE:—								
Winter Course and First and Second Years:								
Sons, daughters, etc., of farmers of the Province of Quebec	Free	$10.00	$5.00	$26.00	$4.00	....	$9.50 (b)	$ 54.50
Other residents of Canada	$ 50.00	10.00	5.00	26.00	4.00	....	9.50 (b)	104.50
Students from outside of Canada	100.00	10.00	5.00	26.00	4.00	....	9.50 (b)	154.50
Third and Fourth Years:								
Sons, daughters, etc., of farmers of the Province of Quebec	50.00	15.00	5.00	26.00	4.00	....	9.50 (b)	109.50
Other residents of Canada	50.00	15.00	5.00	26.00	4.00	....	9.50 (b)	109.50
Students from outside of Canada	100.00	15.00	5.00	26.00	4.00	....	9.50 (b)	159.50
SCHOOL FOR TEACHERS:—								
Intermediate and Kindergarten Classes	Free	5.00	5.00	26.00	4.00	$1.00	5.25 (c)	46.25
Elementary Classes	Free	2.50	5.00	26.00	3.00	1.00	(d)	(f)37.50
SCHOOL OF HOUSEHOLD SCIENCE:—								
B.H.S.Degree Course:								
Residents of Canada	100.00	15.00	5.00	26.00	4.00	1.00	5.25	156.25
Students from outside of Canada	125.00	15.00	5.00	26.00	4.00	1.00	5.25	181.25
Homemaker and Institution Administration Courses:								
Daughters, etc., of farmers of the Province of Quebec	Free	10.00	5.00	26.00	4.00	1.00	5.25	51.25
Other residents of Canada	100.00	10.00	5.00	26.00	4.00	1.00	5.25	151.25
Students from outside of Canada	125.00	10.00	5.00	26.00	4.00	1.00	5.25	176.25
Short Courses (per course):								
Daughters, etc., of farmers of the Province of Quebec	Free	5.00	5.00	26.00	3.00	1.00	(e)	(f)40.00
Other residents of Canada	35.00	5.00	5.00	26.00	3.00	1.00	(e)	(f)75.00
Students from outside of Canada	50.00	5.00	5.00	26.00	3.00	1.00	(e)	(f)90.00

(a) Occupants of single rooms are charged $1.50 extra per week. Students in Agriculture from the Province of Quebec receive a grant from the Provincial Government of $7.00 per month of attendance on account of board.
(b) Women students in the School of Agriculture pay the same for student activities as those in the School for Teachers (intermediate class).
(c) Men students of the School for Teachers (intermediate class) pay the same for student activities as men students of the School of Agriculture.
(d) Students of the elementary class pay for student activities—first term, men $3.25; women $1.50; second term, men $4.00; women $2.25.
(e) Short course students pay for student activities—autumn and spring courses 75c; winter course $1.50.
(f) Student activities to be added to this total.

THE B.S.A. DEGREE.

Students who shall have completed the regular course of study in Agriculture, as laid down in the Announcement of the College, shall have passed the prescribed examinations for graduation, and shall have performed such exercises as may be prescribed to that end—the whole to the satisfaction of the Faculty of Agriculture—shall be entitled to the degree of Bachelor of Science in Agriculture, and the degree, when abbreviated, shall be designated by the letters B.S.A.

Post-graduate work may be taken at Macdonald College. The degrees offered are M.S.A., M.Sc., Ph.D. These courses are set forth in the Announcement of the Faculty of Graduate Studies and Research.

DEGREE IN HOUSEHOLD SCIENCE.

Students who shall have completed the regular course of study of the first two years in the Faculty of Arts, and shall have passed the prescribed examinations during the course, and thereafter shall have completed a special course of study for two years at Macdonald College, shall have passed the prescribed examinations during the said course and also the special examinations for graduation; and shall have performed such exercises as may be appointed to that end, the whole to the satisfaction of the Teaching Staff of Macdonald College, and also of any other examiners whom the Corporation may associate with the said staff, shall be entitled to the Degree of Bachelor of Household Science.

PROVINCIAL GOVERNMENT GRANTS TO STUDENTS FROM THE PROVINCE OF QUEBEC.

(1) *School of Agriculture.*

The Department of Agriculture of the Province of Quebec grants to each student who belongs to the Province of Quebec $7.00 per month of attendance employed in studying according to the time-tables in the School of Agriculture, Macdonald College. This amount will be placed to the credit of such students by the College Bursar and will be applied on account of board and lodging.

(2) *School of Household Science.*

The Provincial Government grants bursaries of $20.00 to $50.00 each to Quebec students from the farming community in the junior and senior years of the School of Household Science.

COLLEGE ANNOUNCEMENT.

Full details as to the courses, etc., will be found in the Announcement of Macdonald College, which will be sent on application to the Principal, Macdonald College, Que.

THE UNIVERSITY BUILDINGS.

THE CENTRE BUILDING.

This is the oldest building of the group. It contains the lecture rooms of the Faculty of Arts, as well as the botanical and zoological laboratories and the offices of the administration.

THE CONSERVATORIUM OF MUSIC.

The Conservatorium of Music is situated at the corner of University and Sherbrooke Streets, adjoining the University grounds. On the ground floor are the offices of the Director and of the Secretary, the library and a concert hall where recitals by the staff and students are given during the session and where orchestral and choral practices are held (the more important concerts take place in the large assembly hall of the Royal Victoria College). The second and third floors contain a number of studios, where lessons are given by the various members of the staff, as well as a room for lectures in theory and history of music, sight-singing, etc. In the basement are several practice rooms.

THE MEDICAL BUILDING.

This building, erected in 1911 at a cost of over $600,000, stands at the corner of Pine Avenue and University Street. Of the central part of the building, the greater portion is set aside for the accommodation of the library, the whole of the front of the second and third floors and of the ground floor being so used. On the third floor is a large students' reading room, 76 x 24 feet, exceptionally well lighted and capable of accommodating 100 readers. On this floor also is the staff journal room and the private offices of the librarian. The second floor is occupied by the stack room, with accommodation for sixty thousand volumes, also by individual research and reading rooms. A portion of the ground floor is set aside for storage. Besides the library, the central portion of the building contains also three lecture rooms, the private museum and offices of the professor of anatomy and administration office, research and preparation rooms of the museum staffs. To the rear of the central building is the museum, probably the most complete structure of its kind in connection with a medical school on this continent. It is built in the form of a cross, three storeys high, splendidly lighted by ample window space on three sides and by a large central light-well. The anatomical collections are placed on the third floor, while the first and second floors are devoted to pathology. The east wing gives accommodation for the Departments of Anatomy, Histology

and Embryology, Parasitology, the Faculty of Dentistry, the Faculty rooms and administration offices, the mortuary and preparation room for dissecting material, as well as ample space for students' lockers and lavatories, and a large well-lighted students' reading and smoking room. On the ground floor of this wing will be found the mortuary, in which there is provision for the storage of 80 subjects, and leading from this is the preparation room. On this floor also is the large locker room, containing 400 steel lockers, the students' lavatory and the students' reading and smoking room, the latter being provided with newspapers and magazines and being under the control of the students themselves. The west wing contains a large assembly hall. The remaining space is occupied by the Departments of Pharmacy and Hygiene.

THE BIOLOGICAL BUILDING.

The Biological Building, completed in 1922, was erected on the site of the original Medical Building, which was parly destroyed by fire in 1907. The new building, with the remaining part of the original Medical Building, constitutes a single system which will be devoted to teaching and research in zoology, botany and general physiology, biochemistry, animal and human physiology, and pharmacology. Each of these departments will occupy a single floor—botany being on the first floor, and the other departments on the upper floors in ascending order.

The building is distinguished by commodious laboratories occupying the south end—each being large enough to accommodate comfortably 96 students. The building is fully equipped in a thoroughly modern way, and will afford every comfort and facility for work in the departments mentioned. The total length of the building is 184 feet. The inside dimensions of the general laboratories at the south end are 30 x 80. The Department of Botany is also provided with a laboratory for plant physiology with three glass houses, each 18 x 60, the purpose of which is in part to provide living material for the work in general biology and general physiology. These buildings stand on the terrace immediately to the north of the Biological Building. There is also a small conservatory, constructed as part of the Biological Building, and adjoining the botanical laboratory. This will serve for demonstration materials and experiments for large classes.

The quarters provided for the Department of Physiology include the fourth floor of the new building and the upper floor of the old building, the two suites of rooms forming one continuous department practically on the same level. The old quarters, containing the large teaching laboratories, have been assigned almost exclusively for the instruction of students, the new quarters providing, in the main, accommodation for research.

The two main teaching laboratories, situated on the upper floor, are each lighted from roof and side and accommodate, in each case, ninety-six students. One of these, for the junior class, has long tables provided with separate motors and shafting for the recording drums. This room is fitted with display cases for physiological instruments and also contains a series of demonstration microscopes. The senior practical room, designed for mammalia work, has sixteen fixed tables arranged in parallel rows (units) of four, each unit-group of four being set out at the same time with the same apparatus. All the tables are fitted with gas, with water-supply and with various electric leads, while units of four are, according to circumstances, provided with separately motor-driven, long-paper kymographs, with air-supply for artificial respiration, with hot water at controlled temperature for perfusion, etc. In close proximity to the two practical rooms is a demonstration theatre, employed for instruction at the commencement of practical work or independent demonstration, with an adjoining dark room of ample size for optical and other experiments.

On the top floor of the same building are also the workshop, class preparation and store rooms, drum smoking and varnishing rooms, lavatories and some research rooms.

As before mentioned the research section occupies one floor of the new edifice. It includes a class room for advanced practical instruction, two large research rooms for staff and for other research workers, a histology room (which includes a dark room), the professor's office and private research room, library, the associate professor's office and private research room, store room for instruments, balance, chemical and gas analysis rooms, string-galvanometer room and animal quarters, including hospital, operating theatre, and sterilizing rooms.

The frog and turtle tanks are in the basement. A separate two-storey building, in close proximity to the department, gives accommodation for mammals.

THE PATHOLOGICAL INSTITUTE.

The Pathological Institute, which will house the Departments of Pathology, Bacteriology and Medical Jurisprudence, will be ready for occupation by the Session 1923-24. This building, over 200 feet long and from 60 to 90 feet wide, faces the Royal Victoria Hospital, with which it is connected by a tunnel. It is of steel and stone construction in harmony with the architecture of the Royal Victoria Hospital and consists of a high basement containing mortuary for twelve bodies, shops, lounge rooms, offices, and machinery rooms. The first floor is given over to Pathology and Medical Jurisprudence (autopsy theatre, lecture room, museum, demonstration rooms, several small laboratories, library and photography.)

The second floor will have the chemical, histological, experimental, animal and other research laboratories. The third floor is set apart for

students' and research laboratories in Bacteriology. With the main building is connected by an archway a small cottage, living quarters for the technical help and for animal rooms. The building contains throughout all floors a refrigerating system (ammonia plant), hot and cold water, live steam and air exhausts, and a special forced ventilating system. The large students' bacteriology laboratory, accommodating 120 students, is built on a rising tier system of student benches, and the whole northeast wall is practically of thick glass.

THE MACDONALD ENGINEERING BUILDING.

This building is designed to provide accommodation for six hundred students. The Departments of Civil Engineering and Architecture are permanently provided for, while the Departments of Electrical and Mechanical Engineering are given temporary accommodation until such time as independent buildings can be provided for the growing numbers in these departments. The ground floor is given up to the civil engineering, geodetic, electrical and mechanical engineering laboratories, and is for the most part 23 feet in height. Mechanical and electrical engineering laboratories and the workshops also occupy the three lower floors of the Workman Building. The centre portion of the second floor is used for purposes of administration (faculty rooms, offices, library, etc.). The front parts of the second and third floors are occupied by eight class rooms which contain 700 seats, while the upper floors, both of the Engineering Building and the Workman Building, are devoted to drafting rooms, containing over 500 tables. The building throughout is of the most approved fire-proof construction, not only in the matter of materials, but in arrangement as well, the several floors being divided by fire walls and fire doors into separate sections. It was erected in 1909 at a cost of about half a million dollars.

THE MACDONALD CHEMISTRY AND MINING BUILDING.

In addition to the large lecture theatre, which seats about 250 students, there are here four lecture rooms for smaller classes and a number of offices. There are also three large general chemical laboratories (each with a floor space of about 2,400 square feet and accommodation for 200 students at a time), large laboratories for assaying, ore dressing and metallurgy, with a very complete equipment, and a number of smaller rooms and laboratories for special purposes, including research work. The reference library contains about 1,400 volumes.

THE MACDONALD PHYSICS BUILDING.

This building is five storeys in height, each floor having an area of 8,000 square feet. Besides a lecture theatre and its apparatus rooms, the building includes an elementary laboratory nearly 60 feet square, large special laboratories, a range of rooms for optical work and photography, separate rooms for private work, and two large laboratories arranged for research, provided with solid piers and the usual standard instruments. There are also a lecture room for mathematical physics, a special physical library and convenient workshops.

THE UNIVERSITY LIBRARY.

This building, which is a fine example of the Romanesque style of architecture, was erected in 1892 by Mr. Peter Redpath, a Governor of the University, and was enlarged in 1900. The general reading room is 110 feet long, 44 wide and 34 high, and will seat 150 readers. The book stacks, four and five storeys in height, have a working capacity of 150,000 volumes. The Medical Library is described in the paragraph dealing with the New Medical Building.

THE OBSERVATORY.

The Observatory is equipped for instruction in the use of meteorological instruments and in astronomical work. It is the Montreal station of the Meteorological Service of Canada. Time signals are given to the city, the railways and to the shipping.

THE POWER STATION.

The new Power Station supplies heat to the following buildings: New Medical Building, Old Medical Building, Engineering and Workman Buildings, Chemistry and Mining Buildings, the Physics Building and the Arts Building. It also furnishes current for light and power to these buildings and to the Royal Victoria College, the Union and Strathcona Hall. The equipment of the station includes boilers of 1,000 H.P. nominal capacity, provision being made for future extension, and engines and generators of 600 kilowatt capacity. The coal bunkers hold 500 tons. The heating distribution is partly by tunnel and partly by underground conduit, the farthest building served being at a distance of 700 feet from the station. Electric cables are placed underground in vitrified clay conduits.

THE REDPATH MUSEUM.

The Museum occupies a commanding position at the upper end of the campus, and besides its central hall and other rooms devoted to the collection, it contains a large lecture theatre, class rooms and work rooms. The collections in botany, palæontology, geology and zoology are very fully and admirably arranged for teaching purposes.

THE ROYAL VICTORIA COLLEGE.

This is a residential college for the women students of McGill University. It is situated on Sherbrooke Street, in close proximity to the University buildings and laboratories. On the ground floor are the offices of the administration, lecture rooms, students' common room, and a spacious dining hall. A gymnasium is fitted up in the basement. On the first floor are other lecture rooms, the library, reading room and a handsome assembly hall. The second and third floors are given up entirely to rooms for resident students. These rooms are handsomely furnished, as indeed is the whole building.

STRATHCONA HALL.

Strathcona Hall is the home of the Student Christian Association of the University. The building is 55 feet by 110 feet, and is five storeys in height. The three upper storeys are arranged to afford residential accommodation for about sixty students. On the ground floor are the secretary's office, sitting rooms, cloak rooms and a hall capable of seating 350 persons. The second floor contains a large reading room, a large game room, and five small rooms for the use of clubs and societies.

THE UNION.

The McGill Union stands at the corner of Sherbrooke and Victoria Streets, within two minutes' walk of the College gates. The building measures 93 feet by 71 feet and consists of three storeys and a basement. On the main floor are the dining and luncheon rooms; on the second floor, billiard rooms, a news hall, a reading room and a library, a study and a lounging gallery (88 ft. by 21 ft.). The large hall is situated in the top storey. It measures 88 ft. by 45 ft. and has a seating capacity of 400. There are also smaller rooms for society meetings, etc. In the basement are baths, locker rooms and an exercise room (24 ft. by 38 ft.). The Union is the social centre of the University, the common meeting ground for students of all faculties. It is intended to promote a broad and true university spirit.

GEOLOGY, MINING AND METALLURGY BUILDING.

As part of the programme which has been decided upon by the Governors of the University, an additional building, to be known as the Geology, Mining and Metallurgy Building, will be erected in 1922 on the University grounds, probably fronting on University Street. This will provide adequate accommodation and a thoroughly up-to-date equipment for the Departments mentioned above. The transfer of these Departments from their present quarters in the Chemistry and Mining Building will leave this building for the exclusive use of the Departments of Chemistry and Chemical Engineering, which will thus be provided with the additional space which they now so greatly need.

LABORATORIES, MUSEUMS AND WORKSHOPS.

LABORATORIES.

BOTANICAL LABORATORIES.

The Department of Botany is housed on the first and ground floors of the newly-constructed Biological Building. The large and well-lighted elementary laboratory will afford ample accommodation for large classes. There are, in addition, smaller laboratories for Phanerogamic and Cryptogamic Botany, special rooms for preparation, sterilization, chemistry and photography and research accommodation. Opening out of the large laboratory is a small conservatory for the culture and preservation of demonstration material.

The practical work in plant physiology, genetics, etc., is done in a special large physiological laboratory (20 ft. by 75 ft.), and three adjoining glass houses, each 60 feet long and 18 feet wide, with the exception of a section of the central house which is 25 feet square.

CEMENT LABORATORIES.

The laboratory is equipped for making complete tests on the strength and properties of cements, mortars, concrete, concrete beams, etc., and includes the following:—Tensile testing machines, hydraulic compression machine (50) ton, specific gravity apparatus, sieves for fineness tests, steaming apparatus, Vicat's and Gilmore's needles, metal moulds, mixers, rammers, balances, etc. Tanks are provided for the storage of briquettes and other test specimens, and the equipment is supplemented by that of the Strength of Materials Laboratory in making tests on large sized specimens.

CHEMICAL LABORATORIES.

(In the Chemistry and Mining Building.)

Each of the three principal laboratories has a floor-space of about 2,400 square feet, and together they provide accommodation for nearly two hundred students working at a time. They are lighted on three sides, have special ventilation, and have ample hood space. Laboratory A is planned for beginners, and the other two for more advanced work; B for quantitative analysis and C for organic preparations and qualitative analysis. In connection with each of the main laboratories is a balance-room equipped with balances by several of the best makers and an instruction room.

Physical chemistry is provided for in a special laboratory, nearly 30 by 40 feet, supplied with electricity, steam, vacuum pumps, etc. The equipment of this laboratory consists of the apparatus necessary for all requisite experiments in physical chemistry, determination of the specific gravities of solutions, of the depression of freezing point, of the rise of boiling point, and of densities of gases and vapours. There are constant-temperature baths for accurate measurement of solubilities, Kohlrausch's apparatus for determining the electrical conductivity of solutions, and the apparatus necessary for measuring the electromotive forces generated between metals and their solutions, and in voltaic cells generally. There are also calorimeters for measuring the heat effect produced in chemical reactions. On the same floor there is an optical room, devoted more particularly to crystallographic work and furnished with goniometers, polarising miscroscopes, axial-angle apparatus, refractometers, etc.

Immediately adjoining the laboratory of physical chemistry is the photographic department, supplied with two dark rooms, provided with the necessary appliances for all ordinary photographic work.

The laboratory for gas analysis is fitted with a large tank to contain water at the temperature of the room, for use in obtaining a constant temperature in the measurement of gases. The tables are arranged for work with mercury and the laboratory is supplied with the apparatus of Hempel, Dittmar, Orsat, Elliott and others.

The laboratory for electrolytic analysis is supplied with accumulators, thermopiles, platinum electrodes, rheostats, ammeters, voltmeters, etc.

Another room has lately been equipped with electric furnaces and other appliances for electro-chemical work.

The organic department comprises a laboratory for preparations and research, a combustion room for analysis, a dark room for polariscope and saccharimeter work, and a lecture room.

The laboratory for industrial chemistry is especially ventilated and fireproofed. Here operations on a semi-commercial scale may be conducted involving the use of explosive and other dangerous chemicals.

The Chemistry Building is well supplied with small research laboratories for graduate and other research students.

ELECTRICAL LABORATORIES.

The Main Laboratory is equipped primarily for the study of alternating current phenomena and is equipped with motor-driven alternators of various types, giving a range of frequency of from 25 to 250 cycles per sec.; single and polyphase induction motors of the squirrel cage and wound rotor types; single phase series and repulsion motors; constant voltage and constant current transformers; mercury arc rectifier; rotary converters; potential regulators; meters for the measurement of current, voltage,

power, frequency, power factor, maximum demand meters, and wave form; relays, rheostats, circuit breakers, static condensers, reactance coils, synchroscopes and other auxiliary apparatus. An electric travelling crane spans the laboratory and gives facilities for the rearrangement of the machines.

The above laboratory is also used by the Third Year electrical students for the study of current flow in circuits and of direct current machinery.

The Electrical Laboratory on the third floor of the Workman Building is used by the students of other departments who are taking an elementary electrical course, for the study of both direct and alternating current phenomena. The laboratory is equipped with shunt, compound and series wound direct current generators and motors of different types; constant current generators; arc and incandescent lamps; meters for the measurement of current, voltage and power; rheostats, circuit breakers, starters and other auxiliary apparatus. Several alternators, transformers, rotary converters and induction motors along with the necessary instruments and control apparatus are provided for use by the students taking the general elementary course. A hand-operated travelling crane gives facility for the rearrangement of the machines.

The Standardizing Laboratory is equipped for the accurate measurement of direct currents to 1,000 amperes and voltages to 1,500 and of alternating currents to 200 amperes and voltages to 1,500. By the use of standard instrument transformers, alternating currents to 5,000 amperes and voltages to any reasonable value may be accurately measured. The equipment includes Kelvin current and watt balancers; Weston laboratory standard ammeters, voltmeters and wattmeters; potentiometers; Wheatstone and conductivity bridges; galvanometers, standard resistances and cells and other special apparatus.

The power is obtained from two motor generator sets, from one of which direct current to 1,000 amperes may be obtained, and from the other alternating current may be obtained over a considerable range of frequency up to 1,500 amperes and at any phase relation to voltages up to 440.

The High Voltage Laboratory contains the following equipment: Four 200 to 50,000 volt transformers supplied with condenser bushings and insulated so as to operate up to 300,000 volts; one 200 to 2,000 volt insulating transformer; one 110 to 20,000 volt testing transformer; standard spark gaps for oil and air; cathode ray tubes, electrostatic voltmeters and other auxiliary equipment. The transformers are provided with auxiliary voltage coils for direct pressure measurement and for connection to the oscillograph. The connections to this laboratory are such that any machine in the department may be used as a source of power and controlled directly from the transformer room, so that a wide range of frequency and of wave form is available for experimental work.

The Photometer Laboratory contains a Reichanstahlt type precision photometer bar with a wide range of certified standard incandescent lamps, hand operated and power driven universal rotators, motor driven sector disk and a complete set of screens, also a Matthew's integrating photometer for incandescent lamps. A Sharp Millar portable photometer and standardizing set is also installed, with a full range of controlling rheostats and instruments provided with permanent wiring.

Oscillograph Laboratory.—This is equipped with a Blondel triple oscillograph, with both visual and photographic attachments, and is specially adapted for the study of transient phenomena. The department maintains a small machine-shop for instrument and machine repair and for the construction of special experimental apparatus.

Power is supplied to the above laboratories from the 220-volt, 3-wire, D.C. generators in the central power-house. The voltage is maintained approximately constant on the two sides of the sytem by a balancer set located in the Fourth Year laboratory, which is also equipped for supplying constant voltage circuits of 125 volts.

FOREST PRODUCTS LABORATORIES OF CANADA.

The Forest Products Laboratories of Canada, established by the Canadian Government in 1913, under the Forestry Branch, Department of the interior, are associated with McGill University, and are located at 700 University Street, Montreal. The chief functions of the Laboratories are research and technical service in connection with woods and the products manufactured or derived therefrom.

Four divisions for the conduct of technical research are at present in operation, namely those of Timber Tests, Timber Physics, Pulp and Paper and Wood Preservation. Additional divisions will be added as the work develops.

The Division of Timber Tests is engaged in the investigation of the mechanical properties of Canadian woods with the object of establishing authoritative data on their strength. The resulting figures are of value in the employment of woods for any of the numerous purposes in which strength is a factor. Some fifty thousand tests have been made to date and figures relating to the strength of most of the important commercial timbers of Canada are now available. The Division also conducts investigative work on the strength and design of wooden manufactured articles.

The work of the Division of Timber Physics includes the investigation of the physical properties of wood for correlation with mechanical and other characteristics. Special attention is given to the study of microscopic anatomy as a knowledge of the minute structure of woods is the key to many problems encountered in their industrial use. The identification of

woods is a feature of the work and extensive studies of the fibre length of various species have also been made. A reference collection of the commercial timbers of the world, in the form of sections mounted for the microscope, is in course of preparation.

The work on the pathology of woods consists largely in examination of timber in buildings and situations favouring its decay with a view to developing preventive measures. The deterioration of pulp-wood and wood-pulp in storage is also studied with a similar object. An extensive collection of specimens showing types of decay and deterioration has been brought together.

The Division of Pulp and Paper is engaged in the investigation of the paper-making possibilities of Canadian woods, the practical study of processes related to this field and research in fundamental problems of the chemistry of wood. A complete semi-commercial papermill has been installed for investigation on a large experimental scale. The chemical laboratory of the department is provided with complete equipment for experimental research in the chemistry of wood.

The Division of Wood Preservation is concerned with the investigation of methods of preservative treatment for the protection of timber against decay and insect destruction. The experimental laboratory of this division is provided with a complete wood preserving plant of small size in which railway ties and other products may be impregnated with preservatives under pressure. A chemical laboratory in this department is used for analysis of preservatives and examination of treated material.

The facilities of the Laboratories include also a small saw-mill, seasoning yard, wood-working shop, photographic department, exhibit room and a reference library devoted to the technology and utilization of woods.

GEODETIC LABORATORY.

The equipment of this laboratory consists of:—

(1) Linear instruments: a Rogers comparator and standard bar for investigating standards of length; a fifty-foot standard and comparator for standardizing steel bands, chains, tapes, rods, etc.; a Munro-Rogers linear dividing engine.

(2) Circular instruments: a Rogers circular comparator; four level triers.

(3) Time: an astronomical clock and clock circuit in connection with the observatory clocks; chronometers running on mean and sidereal time; chronograph.

(4) Gravity: a portable Bessel's reversible pendulum apparatus with special pendulum clock and telescopic apparatus for observing coincidence by beats.

(5) A water gauge apparatus for testing aneroid barometers.

The laboratory and clock rooms are constructed with double walls and enclosed air spaces, and their heating is controlled by special thermostats, so that the temperature within may be brought to, and held at, any desired degree.

Astronomical Observatory.—The observatory equipment for the purpose of instruction in practical astronomy consists of: a Bamberg prismatic transit with zenith attachment; six astronomical transits for meridian observations; two Troughton & Simms zenith telescopes; two 8″ alt-azimuth instruments; sidereal and mean time clocks and chronometers, chronograph and electrical circuits by which observations and clock comparisons within or without the observatory may be made.

HIGHWAYS LABORATORY.

The Highways Laboratory is equipped for conducting physical and chemical tests of road building materials, such as asphalts, tars, brick, stone, gravel, sand, etc. Among the more important items of equipment are Deval and Dorry machines; a standard rattler; an impact testing machine for rock; a diamond drill, lap and saw for preparing rock specimens; balances and scales; asphalt ductility machine; penetrometer; screens and screen shaker; extraction apparatus; drying ovens (gas and electric); viscosimeters; flash point testers; specific gravity apparatus; melting point apparatus; and Osborn adhesiveness machine for bituminous materials. There is also a large assortment of chemical glassware, etc.

Facilities for advanced work are greatly increased by the fact that this laboratory is operated in close connection with the Strength of Materials laboratory.

HYDRAULIC LABORATORY.

In this laboratory the student studies experimentally the laws governing the flow of liquids through orifices, pipes, weirs, etc., and also carries out experiments on the efficiency of various forms of water motors running under different conditions as regards head and supply.

The equipment includes:—Apparatus for the measurement of the discharge of water from orifices, nozzles, weirs, etc., under varying conditions; arrangements for investigation of the loss of head by surface friction, and at curves and bends in pipes; Venturi meter for use at different discharges; a hydraulic ram working against different heads; various water motors, including Pelton wheel, Girard impulse turbine; apparatus for measurement of pressure due to impact of jets on surfaces of different forms; gauge testing appliances; Hele Shaw's apparatus for study of the steam lines in a perfect fluid, illustrating the flow round obstructions in a channel, and numerous magnetic problems; numerous calibrated tanks, weighing appliances, and measuring apparatus in connection with the above.

MECHANICAL ENGINEERING LABORATORIES.

These laboratories are used in connection with the courses in Mechanical Engineering subjects. The smaller apparatus belonging to the laboratories includes the necessary equipment of weighing machines, ordinary and water dynamometers, steam calorimeters, thermometers, gauges, pyrometers, coal, gas and oil calorimeters, indicators, planimeters, flue gas analysis, etc.

1. Mechanical Laboratory.

The equipment of this laboratory includes:—A Thurston railway pattern oil tester, fitted with water cooling and heating apparatus for varying the temperature of the brasses as desired; standard viscosimeters and other necessary apparatus for the physical testing of lubricants; a high speed horizontal engine having a cylinder 6 inches diameter, 9 inches stroke, and operated by compressed air; a gas-fired preheater for the above engine; two standard 9½-inch Westinghouse airbrake pumps, fitted for testing and for supplying compressed air for experimental and other purposes; a non-rotative Blake steam pump, having steam and water cylinders 4½ and 2¾ inches diameter and 4½ inches stroke; apparatus for measuring the heat loss from pipe coverings and from radiators; a specially designed hydraulic support and fittings, for carrying out experiments on the action of cutting tools in the lathe; apparatus for experiments on the efficiency of pulleys and hoisting appliances; on the efficiency of worm and other gearing, for governor testing; for testing fans and blowers; for studying problems connected with the balancing of reciprocating engines.

2. Steam Engine Laboratory.

This laboraotory is furnished with an experimental steam engine of 120 I.H.P., specially designed for investigating the behaviour of steam under various conditions. The cylinders are 6½ inches, 9 inches, 13 inches and 18 inches in diameter, and the stroke of all the pistons is 15 inches. The cylinders can be so connected as to allow of working as a single, compound, triple, or quadruple expansion engine, either condensing or non-condensing, and with any desired rate of expansion. The jackets are so fitted as to permit of measuring independently the water condensed in the cover, barrel, or bottom jacket of each cylinder, and the engine can be worked with any desired initial pressure up to 200 lbs. per square inch. The measurements of heat are made by means of large tanks, which receive the cooling water and the condensed steam. There is an independent surface condenser and air pump. Two hydraulic absorption brakes and an alternative friction brake serve to measure the mechanical power developed. This laboratory also contains the following machinery:—A Robb automatic cut-off engine, having a cylinder 10½ inches in diameter by 12 inches stroke, which is specially fitted up for the measurement of cylinder temperatures, and can be run at speeds up to 300 revolutions per minute;

an automatic high-speed engine by Macintosh & Seymour, having a cylinder 12 inches in diameter by 12½ inches stroke, in connection with which there is an automatic recording apparatus for registering the load on the brake; a Leonard horizontal engine, having a cylinder 8 inches diameter by 9 inches stroke, specially fitted for instructional work in valve setting and provided with an independent surface condenser; a two stage air compressor (built in the workshops of the Department) taking 40 H.P. and having cylinders 10 inches and 17 inches in diameter, by 15 inches stroke (the compressor delivers its air into reservoirs placed beneath the floor of the machine shop, and is provided with an intercooler whose capacity can be varied as desired); a 15 K.W. Curtis seam turbo-generator with independent surface condenser, air pump, and a bank of lamps for varying the load; two 12 H.P. high-speed forced lubrication compound engines (built in the workshops of the Department), one of which is used to drive a Hall 1-ton Co_2 ice machine.

Steam is supplied to this laboratory by the boilers in the Workman Building. These consist of one 100 H.P. locomotive boiler, Belpaire type, fitted with Howden oil burning furnace, two Babcock and Wilcox water tube boilers, each 60 H.P. These boilers are fitted with the necessary tanks, weighing machines and apparatus for carrying out evaporative tests. For the study of superheated steam, one of the B. & W. boilers is fitted with a superheater built by the Superheater Co., and there is also a B. & W. separately fired superheater.

3. Gas Engine Laboratory.

This laboratory contains a horizontal gas engine by the National Gas Engine Company, having a cylinder 12 inches diameter by 20 inches stroke and developing 40 B.H.P.; a suction type producer for the above with the necessary scrubbers and gas cleaning apparatus; a 10 B.H.P. Otto type gas engine (built in the workshops of the Department), having a cylinder 8½ inches diameter by 12 inches stroke; a 14 B.H.P. 2-cylinder 2-cycle Grey gasoline engine; a 4 H.P. Blackstone oil engine, a Ford automobile engine, and a 9 H.P. Victory (Hoid) oil engine.

METALLURGICAL AND ASSAYING LABORATORIES.

These consist of a large furnace room of 2,000 sq. feet, for metallurgical operations, a furnace room for assaying of 1,300 sq. feet, a balance room, small chemical laboratory, and parts of other rooms, which are utilized for pyrometric and photo-microscopic work. The furnace room is fitted with a water-jacket blast-furnace, 21 inches inside diameter, for smelting lead and copper ores; also a hand reverberatory furnace for roasting ores, having a hearth 14 ft. by 6 ft., and a Bruckner roasting furnace.

The furnace room adjoins the milling and ore-dressing room (see below), and ores which have been crushed and dressed can easily be conveyed into the furnace room for roasting, smelting or leaching treatments.

In addition to this comparatively large scale plant, apparatus has been provided to enable the students to study in detail the more important metallurgical operations, using quantities of ore or metallurgical products of usually not more than a few pounds in weight. With such appliances, the work of the student can be of a more individual character than is generally possible with large-scale plants, and the reactions which occur can be more easily and exactly studied.

For the purpose of small-scale work there is a large crucible furnace which can be used with either natural or forced draught, an oil-fired crucible furnace, an oil-fired assay furnace, a large gas-furnace which can be used either as an oven-furnace or a muffle furnace, and a number of small muffle and crucible furnaces in the assaying laboratory. Several small dental furnaces have been added for the course of instruction in dental metallurgy.

Small blast-furnaces, lined with brick, have been constructed and used successfully for smelting small quantities of copper and cobalt ores. A Roots' blower has been provided for the blast furnaces, and connections for supplying forced draft have been made to the gas and reverberatory furnaces. Leaching operations on a small scale are conducted in stoppered bottles which can be agitated by machinery.

Provision has also been made for electric furnace work. The plant consists of a 50 H.P. motor and a 30 K.W. alternating current generator, together with transformers and measuring instruments. A Colby induction furnace and Rennerfelt and Snyder arc furnaces have been installed for making steel electrically, and the smelting of ores and other electric-furnace operations can be carried on satisfactorily with this plant. A low-voltage 1 H.P. direct-current generator is employed for electrolytic operations, and an electrode rotator has been added for electrolysis on a small scale. An electric muffle furnace, having carbon resisters and a carborundum muffle, is in regular use for determining the melting temperature of refractory materials, measurements being made with an optical pyrometer and Seger cones. The furnace can be heated to 1800°C. A. "surface combustion" gas furnace has also been added for testing refractory materials.

A "hump" electric furnace with recording pyrometer has been installed for the heat treatment of steel and general pyrometric research, and a Hoskins crucible furnace has recently been added.

An oxyacetylene cutting and welding outfit is in regular use and has proved both instructive and useful for repairs and new construction.

A powerful hydraulic press and a piece of apparatus for compressing gases by hydraulic power are available for experiments that have to be conducted under great pressure.

A small drop-testing machine, a Sankey metal-bending tester, and Shore and Brinell Hardness testers have been installed for investigating the mechanical properties of metals. The assay laboratory contains a small pair of jewellers' rolls.

The assaying laboratory is equipped with a number of muffle and crucible furnaces fired with coke, a large gas muffle furnace and a small muffle furnace and crucible furnace fired by gasoline.

Adjoining the assaying laboratory are the balance room and a small laboratory for chemical work. In another room are a number of electrical and other pyrometers, metallographic microscopes, and a micro photographic outfit for recording the microscopic structure of metals and alloys. Two very satisfactory polishing machines, for preparing metal specimens for examination, have been built in the Department. Each of these has three discs, for different grades of polishing powders and is driven by an electric motor.

MINING AND ORE-DRESSING LABORATORIES.

The Department of Mining Engineering has one large laboratory for ore-dressing, and a number of rooms of moderate size equipped for use as special laboratories, dark room, machine shop, etc. The effective floor space is about 8,500 square feet, in addition to which the departmental store rooms, ore bins, etc., have an area of 1,500 feet.

The ore-dressing laboratory proper is built in two storeys about a central well and has about 5,000 feet total floor space. The equipment comprises two classes of apparatus. First, a number of pieces specially designed for individual work on a small scale. Many of these are for elementary investigation and demonstrations of a theoretical nature, others are working reproductions on a reduced scale of typical ore dressing machines. Second, standard apparatus for ore crushing, sampling, milling, concentrating and for coal washing. This apparatus has been chosen from the best designs in common use, and whenever possible each important class of ore-dressing machinery is represented by two or more different types, in order that comparisons may be made. Each machine is ordinarily used and tested independently, but, when expedient, a number of machines can be connected and thus complete plants of various kinds can be improvised, each of sufficient capacity to test considerable lots of material under approximately working conditions.

The chief pieces of apparatus in the main laboratory are rockbreakers of four kinds, Blake, Dodge, Gates, and Sturtevant; gravity stamp mills of 600 and 950 lbs. respectively and a small steam stamp for crushing and amalgamating; high speed steel-tyred rolls and a 3-foot Huntington mill for fine crushing; Sturtevant and Gates grinders for preparing samples, and ball mills, pebble mills and amalgamation pans for extremely fine grinding.

Following these there are Bell, Jones and Brunton samplers; a Callow belt screen; a series of trommels and power shaking screens for sizing the crushed ores; an especially designed jig of two compartments with adjustable eccentric, cam and slide mechanisms, a pneumatic jig, a Richards pulsator jig, a Taylor vibrating jig and several small hand and power jigs for coarse and medium concentration; slime tables of several types, including a Frue vanner, Wifley and Butchart riffled tables; magnetic separators of three types, an electrostatic separator, dry and wet coal washers, flotation apparatus of several different types for both continuous and intermittent operations; a pachuca agitator, cyanidation vats and agitators, an Oliver filter with the necessary tanks, pumps, etc., and several smaller vacuum and pressure filters; plates, pans and barrels for amalgamating gold and silver ores; settling and feeding cones, and various other special pieces of ore-dressing apparatus.

An hydraulic lift and the necessary jet elevators, feeders, samplers, steam jacketed drying tables, etc., are provided for use in heavy continuous work. The power chiefly used is electricity, generated in the University power station and utilized through a number of independent motors aggregating 100 H.P., but steam is used for some pieces of apparatus and others may be driven by a Pelton wheel. A motor-driven vacuum pump and air-compressor of $7\frac{1}{2}$ H.P. provides an ample supply of compressed air. The Department is equipped with suitable apparatus for electrical measurements, and is thus able to make continuous and accurate determination of the amount of power used by each machine.

In addition to the main laboratory, there are excellent facilities for advanced and research work—including a small but thoroughly equipped chemical and assay laboratory and a photographic room. The Department possesses a number of cameras, microscopes, recording gauges and indicators, a good equipment of weighing and measuring devices, and special apparatus for advanced theoretical investigation.

THE PHYSICAL LABORATORIES.

The equipment of the Macdonald Physical Laboratories comprises: (1) apparatus for illustrating lectures; (2) simple forms of the principal instruments for use by students in practical work; (3) various types of important instruments for exact measurements, to be used in connection with special work and research.

The magnetic laboratory contains magnetic instruments and variometers of different patterns, and also a duplicate of the B.A. Electrodynamometer. The laboratory on the opposite side of the basement contains a Lorenz apparatus for the absolute measurement of resistance, constructed under the supervision of Prof. Viriamu Jones.

There is a constant temperature room, surrounded by double walls, which is fitted for comparator work.

The first floor contains the main electrical laboratory, which is a room 60 feet by 40, and is fitted with a number of brick piers, which come up through the floor, and rest on independent foundations, in addition to the usual slate shelves around the walls. This room contains a large number of electrometers, galvanometers, potentiometers, and other testing instruments of various patterns, and adapted for different uses. Three small research laboratories adjoin the electrical laboratory. A well equipped workshop serves for the construction of research apparatus and repair work.

On the second floor of the building there is the heat laboratory, devoted to advanced work in thermometry, pyrometry and calorimetry and also to such electrical work as involves the use of thermostats and the measurement of the effects of temperature. This adjoins a private laboratory fitted for research work.

The third floor contains two small lecture rooms, a library and reading room for the staff and professors' rooms.

The fourth floor contains the large elementary laboratory, a room 60 feet square, devoted to elementary practical work in heat, sound, light, electricity and magnetism. There is a demonstrators' room adjoining, and an optical annex devoted to experiments with lenses, galvanometers, etc., which require a darkened room. On the other side of the building there is a spectroscopic room, containing a six-inch Rowland grating, with mountings by Brashear, and other large spectrometers and polarimeters; also a series of smaller optical rooms, including a photometric room, especially fitted for arc photometry, and a dark room for photographic work.

STRENGTH OF MATERIALS LABORATORIES.

These laboratories are equipped with apparatus for the determination of the physical properties of the materials of construction and for illustrating the fundamental laws of the strength of materials. The equipment includes:—

(*a*) Riehle testing machine of 60,000 lbs. capacity, a Wicksteed 100-ton, a Wicksteed 50-ton, and an Emery 75-ton machine for testing the tensile, compressive and transverse strength of the several materials of construction. To the 100-ton Wicksteed has been added a specially designed arrangement, by which the transverse strength of girders and beams up to 26 ft. in length can be determined. Special holders have also been designed and made in the laboratory for investigating the tensile and shearing strength of timber, and for the testing of wire ropes, belts, etc. An Olsen machine of 10,000 lbs. capacity is used for testing wire.

(*b*) A Rondet-Schor Machine, with a capacity of 500 kilograms, for testing textile fabrics.

(*c*) A Torsion Machine with a specially designed angle measurer, by which the amount of the torsion can be measured with extreme accuracy.

(*d*) An accumulator, furnishing a pressure of 3,600 lbs. per square inch, which is transmitted to the several testing machines, and ensures a perfectly steady application of stress, an impossibility when any form of pump is substituted for an accumulator. An automatic electric motor has been designed in the laboratory and constructed for the purpose of actuating the accumulator.

(*e*) A Blake and Worthington steam pump and an electric pump, designed to work against a pressure of 3,600 lbs. per square inch. The accumulator may be actuated by any of the pumps, and, if at any time it is necessary to do so, any of the pumps may be employed to actuate the testing machines direct. When in operation, the work of the pump and the accumulator is automatic.

(*f*) Extensometers of the Bovey, Ewing, Unwin, Martens, Marshall and other types.

(*g*) Portable cathetometers, and also a large cathetometer specially designed and constructed for the determination of the extensions, compressions and deflections of the specimens under stress in the testing machines.

(*h*) Various electric motors for working the several machines.

(*i*) A drying oven for beams up to 26 feet in length. The hot air in this oven is kept in circulation by means of a fan driven by an electric motor.

(*j*) Numerous gauges, amongst which may be specially noticed an Emery pressure gauge, graduated in single lbs. up to 2,500 lbs. per square inch. All of the testing machines are on the same pressure circuit, and are connected with the Emery gauge and also other standard gauges, including recording gauges. This arrangement provides a practically perfect means of checking the accuracy of the testing.

(*k*) Special apparatus and recording gauge for the testing of hose, etc.

(*l*) Dynamometers for measuring the strength of textile fabrics, the holding power of nails, etc.

(*m*) Apparatus for determining the elasticity of long wires.

(*n*) Apparatus for determining the hardness of materials of construction, including Shore scleroscope.

(*o*) Zeiss and other microscopes.

(*p*) Delicate chemical and other balances. A very important part of the equipment is the Oertling balance, capable of indicating with extreme accuracy weights of from .00001 lb. up to 125 lbs.

(*q*) Apparatus for the microscopic study of metals and for microscopic photography.

(*r*) Micrometers of all kinds, including a 10-inch Howard gauge, and Berry strain gauges.

(*s*) A transverse bending machine which is adapted for loads up to 3,000 lbs. and for beams of 10 ft. span, and a testing machine for applying bending and torsion simultaneously.

PETROGRAPHICAL LABORATORIES.

The Petrographical Laboratory, containing the chief rock collections of the University, is situated in the Chemistry and Mining Building. It is provided with a number of petrographical microscopes by Bausch, Lomb, Seibert, Grouch, and Fuess, as well as with models, sets of thin sections, electromagnets, heavy solutions, etc., for petrographical work.

A collection of typical rocks has been especially prepared for the use of students, and a complete equipment for cutting, grinding, and polishing rocks has been installed, which runs by electric power and gives excellent facilities for the preparation of thin sections for microscopic use.

For advanced work and petrographical investigation, Dr. Adams' extensive private collection of rocks and thin sections is available for purposes of study and comparison.

THE PSYCHOLOGICAL LABORATORY.

The psychological laboratory occupies two rooms in the Arts Building. It contains apparatus for the study and investigation of sensation, perception, ideas, memory, association, attention, volition, feelings, emotions and reaction. This equipment serves three purposes: First, it is adapted to research work in the various fields of experimental psycology, including physiological psychology, educational psychology, and applied psychology. Second, it is used to acquaint beginners with the methods of experimental psychology, both qualitative and quantitative. Third, it furnishes material for experimental demonstration in the elementary and advanced lecture courses.

THE ZOOLOGICAL LABORATORIES.

The zoological laboratories are situated in the new Biological Building where ample provision is made for the accommodation of all classes.

The equipment includes microscopes and microtomes and accessories of different models for various requirements; fresh water aquaria, preparations, charts and materials for research. Specimens exhibited in the Peter Redpath Museum are available for study and illustration.

Arrangements can be made with the Biological Board of Canada for qualified students to take up some branch of original work at the Atlantic Biological Station, St. Andrews, N.B., during the summer months and to complete the investigation here during the session.

MUSEUMS.

ARCHITECTURAL MUSEUM.

The Museum of the Department of Architecture contains a representative collection of historic casts illustrating the development of architectural ornament and form, and the technique of architectural material. Many of the casts have been specially prepared for the Department. The group of English mediæval art is unique in any University on this continent. The collection of metal work includes examples of iron, brass, copper and jewellery, and is arranged so as to exhibit the technical possibilities of the material.

THE McCORD NATIONAL MUSEUM.

This Museum is located in the old Joseph House, at the corner of Sherbrooke and McTavish Streets. The collection is a gift to the University from Mr. David Ross McCord of Temple Grove, a graduate in Arts of 1863, and in Law of 1867. The range of the collection is most extensive, comprising, as it does, mementoes of the great statesmen, warriors, writers, and spiritual leaders among the two principal races which are now represented in Canada, as well as of the great explorers of every part of the North American continent. The Arctic souvenirs are especially numerous and important, and in the department of Wolfiana, the Museum is probably unrivalled.

One of the most important departments is that treating of the North American Indian, the section relating to the Indians of the Eastern half of the continent being especially complete. Here are to be seen the arms and personal relics of Tecumseh and Brant, and most wonderful specimens of wampum and Indian silver. The great series of paintings illustrative of the campaigns and archæology of Canada are not only accurate, but artistic. There are separate departments for china, glass and historical furniture as well as one for the cradle industries of Canada. There is a special room for relics of the Founder of the University, and of its first great Principal, Sir Wm. Dawson, with his distinguished colleagues in science at the time, Sir William Logan and Dr. Sterry Hunt.

A special aim of the Museum is to form a school of useful and ornamental art, based in types of native Indian industry, such as the manufacture of wall papers, works in metal of all kinds, and ceramic work, in the motifs for which the Museum is especially rich.

THE PETER REDPATH MUSEUM.

1. The botanical room on the ground floor contains the herbarium consisting of 50,000 specimens of Canadian and exotic plants and collections illustrating structural and economic botany.

2. In the corridor on the ground floor is exhibited the Todd Ethnographical Collection from West Africa.

3. The Lyman entomological room is also situated on the ground floor. Mr. A. F. Winn is the entomological curator under the Lyman Bequest.

4. On the first floor is a room over the entrance hall, in which are cases containing archæological and ethnological objects, including collections from the Queen Charlotte Islands, from Egypt, and from West Africa.

5. This room opens into the great museum hall, on each side of which are alcoves with upright and table cases containing the collection in palæontology arranged primarily to illustrate the successive geological systems, and subordinately to this, in the order of zoological and botanical classification, so as to enable the student to see the general order of life in successive periods, and to trace any particular group through its geological history.

6. At the extreme end of the hall are placed the collections of minerals and rocks, arranged in such a manner as to facilitate their systematic study. In the centre of the hall are economic collections and large casts and models. These compose the Sir William Logan Memorial Collection.

7. In the upper story or gallery of the great hall are placed the zoological collections; the invertebrate animals in table cases in regular series, beginning with the lower forms; the vertebrate animals in upright cases, in similar order. The PHILIP CARPENTER COLLECTION of shells is especially noteworthy for its arrangement and completeness.

Papers and memoirs relating to certain type specimens in the collections can be obtained from the Assistant Curator. Classes of pupils from schools can be admitted on certain days under regulations which may be learned from the Professors of Botany, Geology and Zoology or from the Registrar of the University.

MUSEUM OF PATHOLOGY.

DIRECTOR:—PROFESSOR HORST OERTEL.

CURATOR:—MAUDE E. ABBOTT.

ASSISTANT CURATOR:—W. W. BEATTIE.

OSTEOLOGIST AND PREPARATOR:—MR. E. L. JUDAH.

SHOP ASSISTANT:—J. GIROUX.

The Pathological Museum of the University contains to date (May 1st, 1923) approximately 7,440 specimens, of which some 3,540 are mounted and catalogued on the Museum shelves, and the balance are in a carefully labelled and classified storage, where they are readily available for teaching,

and from which they are constantly being drawn and added to the display collection on the shelves of the Museum proper. A descriptive catalogue is in process of preparation. The Museum includes the pathological collection of the Royal Victoria Hospital, which consists of some 240 specimens preserved in colours, mounted and catalogued. Some 110 models, of microscopic slides and charts for pathological and clinical teaching, are filed in the Museum.

MUSEUM OF ANATOMY.

DIRECTOR:—PROF. S. E. WHITNALL.

The Anatomical Museum is designed primarily as a teaching museum to be used in conjunction with the didactic and practical instruction given in the Department of Anatomy. It now contains several thousand preparations and models arranged to illustrate general embryology; human embryology and organogenesis; the theory of human evolution; the prehistoric races of mankind; physical anthropology; comparative osteology; general comparative anatomy and the details of human structure, regional, systematic and topographical.

In addition to the material which is exhibited in the museum cases several hundred wet preparations are kept in storage and are used as teaching specimens in the class and dissecting rooms.

Special collections illustrating the anatomy of regions and organs have been formed and are being continually augmented. These are available not only for undergraduate teaching, but also for use by interested graduates.

A collection of over two thousand lantern slides and several hundred stereoscopic photographs is maintained.

MUSEUM OF HYGIENE.

DIRECTOR:—PROF. T. A. STARKEY.

The material in the museum has been rearranged with a view to exhibiting not only specimens of the best and most approved types of appliances in each particular branch of public health, but also examples of types which are to be avoided on hygienic principles.

In order to facilitate study and reference, the specimens have been classified upon a decimal system under the following sections:—

1. *Disinfection.*—Including disinfecting apparatus of all kinds, disinfectants and antiseptics.

2. *Lighting and Heating.*—Showing contrivances used for these purposes, and illustrative of the principles involved.

3. *Water.*—Showing conditions connected with pollution of water supplies, whether derived from the surface or underground sources; methods of purification on large and small scales; water pipes, etc., and the influence which these fittings may exert upon the water contained therein.

4. *Soils and Buildings.*—Building sites, various kinds of soils; relation between soil and dampness; permeability of soils to gases and water; composition of soils; effects of ground moisture on dwellings; measures to be taken against dampness and foul air; and building materials of all kinds.

5. *Air.*—Including ventilation schemes and appliances; climate and meteorology, with apparatus illustrative of each class.

6. *Foodstuffs.*—Adulterations and sophistications practised; samples of unsound foodstuffs.

7. *Bacteriological and Pathological.*—Specimens of diseased meats; specimens and slides of all the common micro-organisms, pathogenic and non-pathogenic.

8. *Clothing.*—Specimens of all the materials utilized for the manufacture of clothing, showing the raw state and the various processes through which they pass until the finished product is reached; the hygienic value of these various articles is also set forth.

Injuries and deformities which may directly result from the use of badly designed articles of clothing; history and evolution of clothing.

9. *Drainage and Refuse Disposal.*—This section includes every type of appliance used as sanitary fixtures in buildings; drainage schemes; ultimate disposal of refuse both liquid and solid; refuse destructors, and sewage disposal plants. The section also includes types of faulty methods and appliances which on principle ought to be avoided.

In addition to the regular museum exhibit, there is a collection of over 1,000 lantern slides illustrative of phases of hygiene. The slides have been so arranged as to be available for demonstrations as hand specimens.

A catalogue with text and full description of all the exhibits contained in the museum is issued by the University authorities, and may be purchased at the general office.

WORKSHOPS.

The workshops, erected on the Thomas Workman Endowment, have a floor area of more than 20,000 square feet.

Equipment.—The carpenter shop and the pattern shop contain thirty-eight carpenters' and pattern-makers' benches complete with the necessary sets of hand tools, twenty-two wood-turning lathes with their turning tools, a large pattern-maker's lathe for faceplate work, one circular-saw bench, a jig-saw, a band-saw, two wood-trimmers, a surface-planer, a thickness planer, a mortising machine, a saw-sharpener, and one universal wood-working machine.

The smith shop is provided with twenty Sturtevant forges, which are power-driven and are connected with an exhaust fan. There is a power hammer, and the necessary equipment of anvils, swage blocks, sets, flatteners and other tools. Provision is made for instruction in soldering and brazing.

The foundry has benches, tools and apparatus for bench and floor moulding and core-making, and is able to accommodate twenty students. A gas-fired brass melting furnace, a cupola for melting iron, and the necessary core-ovens and core-benches give facilities for undertaking iron foundry work in green and dry sand, and for brass moulding. The shop is served by a hand travelling crane of one-ton capacity.

The machine shop has twelve 18-inch engine lathes, three 16-inch engine lathes, two 14-inch engine lathes, one 18-inch turret lathe fitted for stud and screw making, one 27-inch engine lathe, one brass-finishing lathe, one 36-inch vertical drilling machine with compound table, one universal milling machine with vertical milling attachment and dividing headstock, one planer capable of taking work up to 24 x 24 in. x 5 ft., one 9-inch slotting machine, two 16-inch shapers, one universal grinding machine, centering machine, a cutter grinder, a tool grinder, and an inch vertical drilling machine with compound table, one universal buffing and emery grinding machine. There are vise benches for twenty-five students, with the necessary hand-tools, and a marking-off table. The tool-room contains a full equipment of drills, reamers, milling cutters, and accessories, gauges, calipers, and other measuring instruments.

All the machinery in the workshops is driven electrically by motors taking power from the generating station in the Macdonald Building.

REGISTER OF STUDENTS.

The names of students in the Department of Social Service, the School for Graduate Nurses, the School of Physical Education, the Graduate School and the Faculty of Music are not included in this list.

NAME	FACULTY AND YEAR	HOME ADDRESS
Abbott, Alfred Henry	Com. 1	N. Edmonton, Alta.
Abbott, Arthur Caldwell	Ap. Sci. 2	299 Pine Ave. W., Montreal, Que.
Abbott-Smith, George W	Med. 4	10 Bellevue Ave., Westmount, Que.
Abbott-Smith, Henry Bancroft	Ap. Sci. 4 (El.)	10 Bellevue Ave., Westmount, Que.
Abella, Ernesto	Ap. Sci. 1	136 St. Nicholas St., Havana, Cuba.
Aber, William Harry	Law 1	1673 Notre Dame St. W., Montreal, Que.
Abey, William John H	Med. 3	Chater, Man.
Abinovitch, Monroe	Arts 2 (Hon.)	4462 Sherbrooke St. W.
Abraham, Johnston William	Dent. 4	88 City Councillors St., Montreal, Que.
Abramovitch, Joseph Saul	Arts 1	598 Drolet St., Montreal, Que.
Abrahamson, Hyman	Com. P	44 Emerson St., Portland, Me.
Acker, John Christopher	Med. 5	26 Bland St., Halifax, N.S.
Ackman, Frederick Douglas	Med. 5	177 Botsford St., Moncton, N.B.
Acton, Joseph Henry	Med. 4 (5 Year Course)	Gananoque, Ont.
Adam, Douglas Cameron	Arts 1	48 Hampton Court Apts., Mountain St., Montreal, Que.
Adams, Leyland John	Med. 2	Magog, Que.
Addie, Donald Kyle	Ap. Sci. 3 (Me.)	148 St. Cyrille St., Quebec, Que.
Addleman, William	Med. 2	312 Daly Ave., Ottawa, Ont.
Adney, Francis Glenn	Arts 4 (Hon.)	Woodstock, N.B.
Affleck, Jean Scott	Arts 2 (Hon.)	O'Conner St. & Second Ave., Ottawa, Ont.
Aggiman, Selim	Com. 2	Constantinople, Turkey.
Ahern, Philip Charles B	Ap. Sci. 4 (El.)	377 Daly Ave., Ottawa, Ont.
Aikman, Howard	Arts 2	340 St. Catherine Road, Montreal, Que.
Airey, Henry Talbot	Ap. Sci. 1	R.R. No. 1, Nelson, B.C.
Aitken, Agnes Jean	Arts 1	Newcastle, N.B.
Albert Joseph Guy	Arts P	Van Buren, Maine.
Alexander, Benjamin	Med. 4 (6 Yr. Course)	28 Durocher St., Montreal, Que.
Alexander, Edward Ryckman	Arts 3 (Hon.)	334 Harvard Ave., Montreal, Que.
Allan, John Maynes	Ap. Sci. 4 (Chem.)	P.O. Box 650, Halifax, N.S.
Allan, Warde Baunton	Arts 4 (Hon.)	602-13th Ave. W., Calgary, Alta.
Allanson, William (Left Dec. 1922)	Dent. 1	96 Seventh St., Ridgefield Park, N.J.
Allcorn, Philip Leslie	Ap. Sci. 2	99 Selby St., Westmount, Que.
Allen, Irene Grace	Arts 1	655 Grosvenor Ave., Westmount, Que.
Allison, Jesse Graham	Ap. Sci. 1	619 Belgium Ave., Westmount, Que.
Almond, Lloyd Beemer	Ap. Sci. 2	299 Marlowe Ave., Montreal, Que.
Altner, Harry Arthur	Med. 4 (6 Yr. Course)	537 Cadieux St., Montreal, Que.
Altrovitch, Samuel	Arts 1	899 Cadieux St., Montreal, Que.
Alward, Harold Cedric	Med. 4 (5 Yr. Course)	84 Burpee Ave., St. John, N.B.
Amaron, Errol Calvin	Arts 4 (Hon.)	Naramata, B.C.
Ambridge, Douglas White	Ap. Sci. 4 (Chem.)	5a Marsella No. 83 Mexico City, Mex.
Ambrose, John Howard	Ap. Sci. 3 (Met.)	42 Charlton Ave. E., Hamilton, Ont.

NAME	FACULTY AND YEAR	HOME ADDRESS
Amos, Edward Augustus	Med. 4 (5 Yr. Course)	8-36th Ave., Lachine, Que.
Amos, Isadore Louis	Med. 3	1456 St. Urbain St., Montreal, Que.
Amos, Pierre Charles	Arch. 4	592 St. Joseph St., Lachine, Que.
Anderson, Dan	Ap. Sci. 4 (El.)	289 Richmond St., Charlottetown, P.E.I.
Anderson, Duncan Robinson	Law 2	100 Park Ave, Montreal, Que.
Anderson, Edward Stanley	Med. 4 (5 Yr. Course)	c/o Mills, Raney & Dewar, Sun Life Bldg., Toronto, Ont.
Anderson, Llewellyn Kennedy	Arts 4 (Hon.)	Beauharnois, Que.
Andrews, Donald Cochrane	Ap. Sci. 3 (Ci.)	68 Arlington Ave., Westmount, Que.
Andrews, Everard Aloysius	Med. 3	St. David's, Grenada, B.W.I.
Andrews, Florence	Arts P	490 Cavendish Ave., Montreal, Que.
Anglin, Frances	Arts 1	682 Roslyn Ave., Westmount, Que.
Anglin, Ives Maurice	Med. 5	St. John, N.B.
Annable, Weldon Grant	Com. 2	43 St. Luke St., Montreal, Que.
Anson, Clement Matthew	Ap. Sci. 2	Whistle Road, Manly, N.S.W., Australia.
Anstey, Eleanor Mary	Arts 1	22 Stanley St., Montreal, Que.
Antliff, James Cooper	Ap. Sci. 4 (El.)	111 Blenheim Place, Westmount, Que.
Apps, Carl Overy	Med. 5	Mt. Pleasant, Ont.
Arnoff, Louis Norman	Med. 1	1719 Marquette St., Montreal, Que.
Arbuckle, Albert Meldrum	Med. 2	Patterson St., Pictou, N.S.
Archambault Jules	Ap. Sci. 1	443 Durocher Ave., Outremont, Que.
Archer, Aubrey Clifford	Ap. Sci. 3 (Me.)	Hastings Lodge, Barbados.
Archibald, Francis Magoun	Ap. Sci. 4 (Chem.)	1718 Hutchinson St., Montreal, Que.
Archibald, Ian Thurston	Arch. 1	4278 Dorchester St. W., Montreal Que.
Argue, Forrest Berkley	Med. 4 (5 Yr. Course)	Shawville, Que.
Armitage Clifford Daigneau	Com.2	45 Montreal St., Sherbrooke, Que.
Armitage, Ernest Trenholme (Left Oct. 1922)	Med. 2	Montreal, West, Que.
Armstrong, Arnold Victor	Ap. Sci. 4 (El.)	845 Oxenden Ave., Montreal, Que.
Armsrong, Charles Alfred R	Arts 2	778 George St., Peterborough, Ont.
Armstrong, Gordon	Phar.	539 Grand Trunk St., Montreal, Que.
Armstrong, William S. S.	Med. 4 (5 Yr. Course)	10050-117th St., Edmonton, Alta.
Arnold, Fred M	Ap. Sci. P	263 Sicard Ave., Montreal, Que.
Ashby, Reginald Beale	Ap. Sci. 3 (El.)	12 Highland Ave., Montreal, Que.
Aspler, Isidore	Arts 1	1 Esplanade Ave., Montreal, Que.
Atkinson, Doris Evelyn	Arts 3 (Hon.)	Melbourne, Que.
Aubry, Albini	Med. 1	Lancaster, Ont.
Aubut, William Lawrence	Med. 1	414 St. Antoine St., Montreal, Que.
Aylmer, Margaret Lydia	Arts P	25 Bellevue Ave., Westmount, Que.
Aylward, Gerald Fitzgerald	Med. 5	c/o H. F. Bullen, Esq., 908 St. Charles St., Victoria, B.C.
Azeff, Henry	Com. 2	1654 St. Urbain St., Montreal, Que.
Bacal, Harry Lyon	Arts 1	37 Church St., Quebec.
Backer, David Russell	Med. 4 (5 Yr. Course)	1337 St. Urbain St., Montreal, Que.
Backman, Peter Louis	Med. 3	1256 St. Urbain St., Montreal, Que.
Bagley, Harry Edison	Med. 4 (5 Yr. Course)	Danville, Que.
Bailey, Loring Withall	Ap. Sci. 3 (El.)	122 Grande Allée, Quebec, Que.
Baillargeon, Paul-Félix	Law 1	1154 St. Hubert St., Montreal, Que.
Baillie, Donald Arthur	Ap. Sci. 4 (Me.)	513 Roslyn Ave., Westmount, Que.
Baily, Francis Arthur A	Ap. Sci. 2	364 Kensington Ave., Montreal, Que.
Baker, Hyman	Law 2	741 St. Lawrence Blvd., Montreal, Que.
Baker, Mary Edith	Arts 2	194 Milton St., Montreal, Que.
Baker, Mildred Lily	Arts 2	159 Hutchison St., Montreal, Que.
Baker, William Edward	Med. 4 (5 Yr. Course)	R.R. No. 2, Carlton, Oregon, U.S.A.
Balbirsingh, Fitz-Gerald	Med. 2	Mucurapo St., San Fernando, Trinidad, B. W. I.

NAME	FACULTY AND YEAR	HOME ADDRESS
Ball, Carolyn Muir	Arts 4 (Hon.)	533 Lansdowne Ave., Westmount, Que.
Ball, Franklin Percival	Med. 2	Waterville, Que.
Ball, John Clement	Med 2	40 William St., St. Catharines, Ont.
Ballantyne, Charles Trenholme	Arts 4 (Hon.)	678 Mountain St., Montreal, Que.
Balleny, James Lister	Ap. Sci. 2	Grand Falls, Nfld.
Ballon, Harry Clarence	Med. 5	255 Bishop St., Montreal, Que.
Banfill, Florence M.	Arts 4	East Angus, Que.
Banford, Jean Elizabeth	Arts 2 (Hon.)	Hawkesbury, Ont.
Banks, Charles Whitney	Med. 4 (5 Yr. Course)	Veteran, Alta.
Barber, Gilbert (Left Oct. 20, 1922)	Dent. 1	P.O. Box 26, Pointe Gatineau, Que.
Barker, Beatrice	Arts P	304 Oxford Ave., Montrea, Que.
Barkoff, Dennis	Dent. 2	409 Wiley St., Fort Willian, Ont.
Barnard, Edmund Austin	Arts 2 (Hon.)	313 Stanley St., Montreal, Que.
Barnes, Dewitt Rowland S.	Med. 4 (6 Yr. Course)	Turin, N.Y.
Barnes, Phillip Harper (Left Nov. 15, 1922)	Med. 2	Clyde, N.Y.
Barnes, Thomas Cunliffe	Arts 1	239 Pine Ave. W., Montreal, Que.
Barnes, William Howard	Ap. Sci. 3 (Chem.)	239 Pine Ave. W., Montreal, Que.
Baron, Henry	Med. 1	1699 St. Urbain St., Montreal, Que.
Barré, Stanislas C. V.	Law 3	1161 St. Hubert St., Montreal, Que.
Barrett, Richard Ethelred	Ap. Sci. 1	Preston Road, Galt, Ont.
Barrett, Russell J.	Ap. Sci. 1	464 B Guy St., Montreal, Que.
Barry, Gerald John	Com. 1	453 Jeanne Mance St., Montreal, Que.
Bartlett, John F.	Ap. Sci. 2	5 Gilmour St., Ottawa, Ont.
Barton, Phillip B.	Med. 2	47 Broad St. Plattsburg, N.Y.
Basken, B. Eileen C.	Arts 3 (Hon.)	350 Somerset St., Ottawa, Ont.
Bassen, Frank Albert	Med. 1	251 King St. E., St. John, N.B.
Batshaw, Harry	Law 2	61 Parthenais St., Montreal, Que.
Bauman, Bert C. F.	Ap. Sci. 1	Buckingham, Que.
Bauman, Moses	Com. 2	846 City Hall Ave., Montreal, Que.
Baxter, Gordon Bruce	Ap. Sci. 1	144 Des Forges St., Three Rivers, Que.
Baxter, Hamilton A.	Dent. 2	285 Hampton Ave., Montreal, Que.
Baxter, Stewart G.	Med. 2	285 Hampton Ave., Montreal, Que.
Bearisto, Everett B	Med. 4 (5 Yr. Course)	Malpeque, P.E.I.
Beardsley, James Murray	Med. 3	Wolfville, N.S.
Beattie, Marion T.	Arts 4	518 St. Joseph St., Lachine, Que.
Beattie, Wilfred Joseph (Left Nov. 5, 1922)	Ap. Sci. 1	10 Reading St., Montreal, Que.
Beck, Reginald E. E.	Com. 1	10 Hyde Park Terrace, London, Eng.
Becker, Labon Mortimer	Arts 1	194 Laval Ave., Montreal Que.
Beckford, Bancroft B	Med. 1	98 Cranston St., Providence, R.I.
Becking, John Albert	Ap. Sci. 3 (Mi.)	32 Wellington St. E., Sault Ste. Marie, Ontario.
Beckwith, Grace Dean M.	Arts 4 (Hon.)	1423 Fernwood Road, Victoria, B.C.
Bedee, Monroe Homer	Ap. Sci. 2	Stanbridge East, Que.
Bedford-Jones, Muriel C.	Arts 1	St. James Rectory, Perth, Ont.
Beinhaker, Israel	Dent. 2	1238 Clarke St., Montreal, Que.
Belanger, Anatole (Left Jan. 24th, 1923)	Ap. Sci. 1	3611 A Casgrain St., Montreal, Que.
Belanger, Joseph-Edouard	Med. 2	541 Besserer St., Ottawa, Ont.
Bell, Alan Stuart	Ap. Sci. 4 (Me.)	178 Chedoke Ave., Hamilton, Ont.
Bell, Charles Renfrew	Ap. Sci. 2	St. John's, Nfld.
Bell, Robert Blagrave	Arts 1	367 Melville Ave., Westmount, Que.
Bell, William Wilberforce	Med. 5	11140-89th Ave., Edmonton, Alta.
Bellew, Leo Thomas F.	Ap. Sci. 1	298 St. Joseph Blvd. W., Montreal, Que.
Benett, Charles Morgan	Ap. Sci. 4 (El.)	7 Dufferin Ave., Brantford, Ont.
Benjamin, Abraham	Ap. Sci. 3 (El.)	1742 Jeanne Mance St., Montreal, Que.
Benjamin, Abraham	Dent. 4	371 Sanguinet St., Montreal, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Bennett, Almerin (Left Dec. 19th, 1922)	Arts 1	Parry Sound, Ont.
Bennett, James Gordon	Arts 2	Calumet, Que.
Bennett, Moe	Phar.	1006 St. Urbain St., Montreal, Que.
Benson, Harry Gladstone	Dent. 2	Grates Cove, B. D. V., Nfld.
Berinbaum, Maurice	Med. 2	473 Colonial Ave., Montreal, Que.
Berlind, Melvyn Moe	Med. 1	462 Elm Ave., Westmount, Que.
Berlind, Samuel Julius (Double Course)	Arts 2	3 Laval Ave., Montreal, Que.
Berman, David	Med. 4 (5 Yr. Course)	308 Cameron St., Fort William, Ont.
Bernstein, Jacob Clarence (Double Course)	Arts 4 Med 2	5 Tara Hall Ave., Montreal, Que.
Bernstein, Saul Harold	Dent. 2	1659 Jeanne Mance St., Montreal, Que.
Berridge, Winston W	Ap. Sci. 2	635A Wellington St., Montreal, Que.
Berwick, Kenneth Cameron	Arts 1	31 Crescent St., Montreal, Que.
Bethel, John Perceval	Arts 3 (Hon.)	31 Markey St., Nassau, N.P. Bahamas.
Bickford, Andrew Arthur	Ap. Sci. 2	c/o New York Trust Co., New York.
Bickford, John William	Med. 3	c/o Banco Americano, Guatemala, Central America.
Bieler, Jacques Louis	Ap. Sci. 4 (Me.)	223 Milton St., Montreal, Que.
Bingham, Margaret Lillian	Com. 2	393 Somerset St., Ottawa, Ont.
Binns, George Frederick	Ap. Sci. 4 (Me.)	261 Melrose Ave., Montreal, Que.
Birbeck, Albert Franklin	Med. 4 (5 Yr. Course)	231 Stanley St., Montreal, Que.
Bishop, Eric Gordon	Ap. Sci. 4 (Mi.)	Greenspon, Nfld.
Bishop, Gilbert	Arts 4 (Hon.)	Western Bay, Nfld.
Bishop, John Gordon	Ap. Sci. 4 (El.)	Cupids, Nfld.
Bissett, Alice MacGowan	Arts P	314 Broadway Ave., Lachine, Que.
Black, Alan Hibbert	Com. 1	202 Milton St., Montreal, Que.
Black, Hugh Murray	Ap. Sci. 4 (Me.)	Windsor, N.S.
Blackall, John F. W.	Ap. Sci. 4 (Me.)	St. John's, Nfld.
Blackler, Chesley F	Med. 3	St. John's, Nfld.
Bladon, Leigh Watson	Ap. Sci. 1	35 Holton Ave., Westmount, Que.
Blain, James George	Med. 4 (5 Yr. Course)	32 Lansdowne Ave., Sault Ste. Marie, Ontario.
Bleau, Alphonse	Ap. Sci. 4 (Met.)	Beloeil, Que.
Bloomfield, Jacob	Ap. Sci. 4 (Me.)	1264 Cadieux St., Montreal, Que.
Bloomfield, Maxwell I	Med. 3	724 St. Denis St., Montreal, Que.
Blount, Charles Reginald	Arts P	Carbonear, Nfld.
Blumenfeld, Edward A	Med. 4 (5 Yr. Course)	1013 Clarke St., Montreal, Que.
Blumenstein, J. Harold	Arts 3 (Hon.)	990 Clarke St., Montreal, Que.
Blumer, Benjamin Charles	Arts P	34 Hutchison St., Montreal, Que.
Blunt, Harry Walton	Com. 1	Granby, Que.
Bogante, Jack	Arts 1	3152 Papineau Ave., Montreal, Que.
Bonavitzsky, Jack	Phar.	1500 Esplanade Ave., Montreal, Que.
Boon, George Arthur	Med. 5	2011 Jeanne Mance St., Montreal, Que.
Boonhour,	Arts P	
Booth, Robert James	Arts 2 (Hon.)	184 Bank St., Ottawa, Ont.
Borden, Douglas Clare	Ap. Sci. 3 (El.)	Pugwash, N.S.
Bostock, Hugh Samuel	Ap. Sci. 3 (Mi.)	Ducks, B.C.
Bouchard J.-Maurice	Ap. Sci. 2	1062 Delorimier Ave., Montreal, Que.
Boucher, Harold H	Med. 3	Chilliwack, B.C.
Bouillon, Ernest Linden	Arch. 4	Paspébiac, Que.
Bouillon, Walter S	Arts 1	Paspébiac, Que.
Boulton, Beverley Knight	Ap. Sci. 2	5 College Court, Quebec, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Bourgoin, Henri-Edmond	Arts 4	Pointe-aux-Trembles, Que.
Bourke, Edward Tennant	Dent. 4	42 Lorne Ave., Montreal, Que.
Bourke, William Manly	Law 2	42 Lorne Ave., Montreal, Que.
Bourne, Austin Herbert	Ap. Sci. 2	43 Third St., St. Lambert, Que.
Bowman, Frederick Basil	Med. 3	Southampton, Ont.
Bown, Charles Roy	Ap. Sci. 4 (Me.)	11 Ankerville St., Sydney, N.S.
Bown, William Edmund	Ap. Sci. 4 (Chem.)	11 Ankerville St., Sydney, N.S.
Boyce, J. Clifford	Med. 4 (5 Yr. Course)	317-11th Ave. E., Calgary, Alta.
Boyd, David (Left early in session)	Ap. Sci. 2	122 George V Ave., Lachine, Que.
Boyd, John Huntley	Med. 4 (5 Yr. Course)	River Bourgeois, N.S.
Boyes, Watson	Arts 3 (Hon.)	205 Newland Ave., Hull, Eng.
Boyle, Ernest Sterling	Med. 5	Wallace, N.S.
Boyle, Hubert Allan	Med. 4 (5 Yr. Course)	No. 1 Algonquin Apts., Edmonton So. Alberta.
Boyle, Joseph Edgar	Med. 3	277 Bronson Ave., Ottawa, Ont.
Bradley, Robert William	Dent. 4	Edmonton, Alta.
Bradshaw, Gordon Rothwell	Ap. Sci. 4 (Mi.)	102 Silica St., Nelson, B.C.
Branch, Campbell William (Left after 1st. Term)	Arts P	4 Long St., St. Johns, Antigua, B.W.I.
Branscombe, Arthur Forrester	Ap. Sci. 2	4357 Montrose Ave., Westmount, Que.
Brault, Magloire-J	Arts P	Cranbrook, B.C.
Braunstein, Moses Mendel	Med. 1	43 Drolet St., Montreal, Que.
Brayton, Merritt James	Med. 4 (5 Yr. Course)	Red Deer, Alta.
Bregan, Henry		
Breithaupt, Paul Theodore	Com. 1	108 Queen St. North, Kitchener, Ont.
Breitman, Reuben	Med. 4 (5 Yr. Course)	1929 Esplanade Ave., Montreal, Que.
Bremner, Douglas Orrin	Ap. Sci. 1	374 Roslyn Ave., Westmount, Que.
Bremner, Marjorie Bain	Arts P	553 Champagneur Ave., Montreal, Que.
Brenchley, Charles Richmand	Com. 3	3351 Granville St., Vancouver, B.C.
Brewer, Wendell Baxter	Com. 3	Cobalt, Ont.
Brierley, James Gossage	Arts 1	623 Sydenham Ave., Westmount, Que.
Bright, John Mowat	Com. 1	471 Victoria Ave., Niagara Falls, Ont.
Brisbane, William Gordon	Ap. Sci. 4 (Ci.)	452 Strathcona Ave., Westmount, Que.
Bristol, John LeVarrie	D.P.H.	Grenada, B.W.I.
Brittain, A. Code	Com. 3	233 Gilmour St., Ottawa, Ont.
Britton, Sydney William	Med. 4 (5 Yr. Course)	Sticklepath, Barnstaple, Eng.
Brock, Malcolm R. (Left Nov. 1922)	Arts 2	Danville, Que.
Brodeur, Jean-Charles	Ap. Sci. 4 (Mi.)	229 Chapel St., Ottawa, Ont.
Brodeur, Joseph-Paul (Left Oct. 7th, 1922)	Ap. Sci. 3 (Ci.)	1097 St. Denis St., Montreal, Que.
Brodie, Dorothy M	Arts 1	Iberville, Que.
Brodie, Gwendolyn Davie	Arts 1	3215 St. James St., Montreal,Que.
Brodie, Ian Hamilton	Med. 5	648-11th St. S., Lethbridge, Alta.
Brodie, Le Sueur	Ap. Sci. 1	287 Laval Ave., Montreal, Que.
Brodie, Maurice	Med. 1	220 Arlington Ave., Ottawa, Ont.
Bromilow, Edmund Grant	Ap. Sci. 2	P.O. Box 275, Station B., Montreal, Que.
Bronson, Harvey Nicol	Arts 2	133 Erie Ave., Hamilton, Ont.
Brooks, Margaret Scott	Arts 3 (Hon.)	4025 Dorchester St., Westmount, Que.
Brotman, Herbert Louis	Arts 1	1238 St. Urbain St., Montreal, Que.
Brough, Frank Sheldon	Ap. Sci. 4 (El.)	48 Windsor Ave., Westmount, Que.
Brouillet, Albert-Joseph (Left Jan. 24th, 1923)	Ap. Sci. 1	176 Milton St., Montreal, Que.
Brown, Allyn Wynne	Med. 4 (5 Yr. Course)	221 Wilson Ave., Montreal, Que.
Brown, Anna Virginia	Arts 1	306 Hampton Ave., Montreal, Que.
Brown, Colin Blair	Ap. Sci. 3 (El.)	613 First Ave., Quebec, Que.
Brown, Ella Marion	Arts 2	Kensington, P.E.I.

NAME	FACULTY AND YEAR	HOME ADDRESS
Brown, Frank Meikle	Med. 4 (5 Yr. Course)	Carman, Man.
Brown, Harold Rossmore	Dent. 1	644 Belgium Ave., Westmount, Que.
Brown, Harold Wilfred	Arts 2	Kensington, P.E.I.
Brown, Henry T.	Dent. 4	536 Argyle Ave., Westmount, Que.
Brown, James Lloyd	Med. 2	2502 Scarth St., Regina, Sask.
Brown, Laurence Wilmott	Med. 4 (6 Yr. Course)	204 Daly Ave., Ottawa, Ont.
Brown, Lawrence Elliott	Arch. 5	149 Carling Ave., Ottawa, Ont.
Brown, Marguerite Campbell	Arts 3	Ayer's Cliff, Que.
Brown, Perley Staples	Med. 4 (5 Yr. Course)	Drumheller, Alta.
Brown, Ronald Earl (Double Course)	Med. 2 Arts 4	Stoughton, Sask.
Brown, Thomas Michael	Arts 1	430 Daly Ave., Ottawa, Ont.
Brown, Walter Franklin	Ap. Sci. 1	2060 Esplanade Ave., Montreal, Que.
Browne, James C. Graham	Com. 3	357 Melville Ave., Westmount, Que.
Browne, John Symonds Lyon (Double Course)	Arts 2	380 Elm Ave., Westmount, Que.
Brownstein, Charles	Arts 3	983 St. Lawrence Blvd., Montreal, Que.
Bruce, Hugh Graham	Med. 4 (5 Yr. Course)	Revelstoke, B.C.
Bruger, Moses (Double Course)	Arts 2	1449 Clarke St., Montreal, Que.
Brumell, John Hunter	Ap. Sci. 3 (Me.)	Buckingham, Que.
Brunet, Joseph-Agénor	Dent. 1, 2	Valleyfield, Que. R.R. No. 3.
Bryant, James Sanborn	Ap. Sci. 1	3161 St. Denis St., Montreal, Que.
Bryce, Lawson Elmhurst	Com. 2	186 Quebec St., Sherbrooke, Que.
Bubroff, Isadore	Law 2	1179 St. Dominique St., Montreal, Que.
Buchanan, William D. H.	Ap. Sci. 3 (Me.)	Gould, Que.
Buckley, Francis Joseph	Med. 5	Dalhousie Jct., N.B.
Buckman, Barnet	Arts 1	174 Laval Ave., Montreal, Que.
Budden, Arthur Napier	Ap. Sci. 4 (Me.)	441 Mackay St., Montreal, Que.
Buell, Kathleen Margaret	Arts 1	146 Wolseley Ave., Montreal West, Que.
Buffam, Basil Scott Whyte	Ap. Sci. 4 (Mi.)	Perth, Ont.
Bujold, Charles Clayton	Med. 1	237 Penobscot St., Rumford, Me.
Bulger, Craig D	Med. 5	Eganville, Ont.
Bulgin, James Douglas	Arts 3	c/o E. J. Bulgin, E.D. & B.C. Bldg., Edmonton, Alta.
Buller, Francis Hamilton	Ap. Sci. 4 (El.)	728 Sherbrooke St. W., Montreal, Que.
Bullock, Theodore Lafleur	Arts P	Roxton Pond, Que.
Burbank, Alton William	Dent. 1	66 Sixth Ave., Lachine, Que.
Burgess, Carl Avard	Dent. 2	201 Queen St., Moncton, N.B.
Burke, Hugh Edmund	Med. 5	Little Metis Beach, Que.
Burke, Walter Edward	Med. 5	43 Huntress St., Portland, Me.
Burland, B. Robins	Ap. Sci. 2	25 Linden Terrace, Ottawa, Ont.
Burland, Geoffrey Robins (Left Oct. 1922)	Com. 2	25 Linden Terrace, Ottawa, Ont.
Burland, Miriam S.	Arts 2 (Hon.)	84 Victoria Ave., St. Lambert, Que.
Burnett, Dillon	Arts 1	23 West 129th Street, New York City.
Burnett, James F. J.	Law 1	731 Sherbrooke St. W., Montreal, Que.
Burney, Lepha Margaret (Left Oct. 10th, 1922.)	Arts 1	338 Somerset St., Ottawa, Ont.
Burroughs, Reginald W. Nelson	Ap. Sci. 3 (Me.)	2628 Jeanne-Mance St., Montreal, Que.
Burton, Thomas Edwin	Dent. 4	Cookshire, Que.
Burwell, William Keith	Med. 3	Renfrew, Ont.
Bushell, Winston	Dent. 3	150 Cote St. Antoine Road, Westmount, Quebec.
Bussière, Henry-Charles	Med. 5	114 St. Famille St., Montreal, Que.
Bustin, Howard Barlow	Med. 4 (5 Yr. Course)	158 St. James St., St. John, N.B.
Bustin, Marion	Arts 2 (Hon.)	158 St. James St., St. John, N.B.
Butler, Ernest W. R.	Ap. Sci. 3 (Me.)	11 Fairmont Ave., Ottawa, Ont.

NAME	FACULTY AND YEAR	HOME ADDRESS
Butler, William Shaw	Med. 4 (6 Yr. Course)	11 Fairmont Ave., Ottawa, Ont.
Buzzell, Henry Walter	Ap. Sci. 3 (Ci.)	Abbotsford, Que.
Buzzell, Leslie Norman	Com. 3	Abbotsford, Que.
Bydwell, Humphrey Burton	Arts P	359 Kensington Ave., Montreal, Que.
Byrne, James Arthur	Med. 3	48 Great George St., Charlottetown, P.E.I.
Cabana, David-Léon	Law 3	210 St. Joseph Blvd. W., Montreal,Que
Calder, James Carswell	Arts 4	Lachute, Que.
Caldwell, Charles Edward	Ap. Sci. 4 (Me.)	Brigus, Conception Bay, Newfoundland
Caldwell, Guy T	Com. 1	88 Henderson Ave., Ottawa, Ont.
Caldwell, J. Ewart	Med. 4 (5 Yr. Course)	344 Frank St., Ottawa, Ont.
Callaghan, Walter John (Left Jan. 24th, 1923.)	Ap. Sci. 1	Fort Covington, N.Y.
Cameron, Alexander Fraser	Arts 1	609 Clarke Ave., Westmount, Que.
Cameron, Alice Virginia	Arts 2	912 Comte St., Montreal, Que.
Cameron, George Mansfield	Arts P	Adamsville, Que.
Cameron, Henry George	Med. 4 (5 Yr. Course)	2421 Twelfth Ave., Regina, Sask.
Cameron, Mabel Alguire	Arts 1 (B.Sc.)	Box 759, Cornwall, Ont.
Cameron, Margaret Burnside (Double Course.)	Arts 3 Med. 1	384 Lansdowne Ave., Westmount, Que.
Campbell, Alexander	Ap. Sci. 3 (Ci.)	87 Cobourg Ave., Winnipeg, Man.
Campbell, Andrew Keith	Arts 2	Ormstown, Que.
Campbell, Edith Dixon	Arts 4	59 Columbia Ave., Westmount, Que.
Campbell, Edith Margaret	Arts 4 (B.Sc.)	190 Bayswater Ave., Ottawa, Ont.
Campbell, Frank Robinson	Ap. Sci. 3 (Ci.)	New Denver, B.C.
Campbell, Gordon Douglas	Arts 2 (B.Sc.)	123 Crescent St., Montreal, Que.
Campbell, Hugh Stanley	Com. 3	371 Grosvenor Ave., Westmount, Que.
Campbell, Laurette A	Arts 4 (Hon.)	161 Selby St., Montreal, Que.
Campbell, S. Hardie	Med. 5	Chesley, Ont.
Campbell-Brown, Hugh Ivie	Med. 2	R.R. No. 1, Vernon, B.C.
Canning, Mary Kathleen	Arts 4 (B.Sc.)	321 Roslyn Ave., Westmount, Que.
Cantero, Antonio	Med. 2	561 Queen St., Sault Ste. Marie, Ont.
Cantley, Donald Fraser	Arts 4 (B.Sc. Hon.)	New Glasgow, N.S.
Capelovitch, Victor	Pharmacy 2	91 Villeneuve St. W., Montreal, Que.
Caplan, David	Pharmacy 1	1645 Mance St., Montreal, Que.
Caplan, Israel Arthur (Left Dec. 20th, 1922.)	Dent. 1	731-B Cadieux St., Montreal, Que.
Caplan, Joseph	Arts 1	173 Esplanade Ave., Montreal, Que.
Carberry, John Edward D	Law 3 (LL.B.)	St. George, Grenada, B.W.I.
Carl, Selma Christine	Arts 2 (Hon.)	88 St. Luke St., Montreal, Que.
Carlyle, Kathleen	Arts P	147 Bishop St., Montreal, Que.
Carney, John Arthur	Dent. 1	110 Leclaire Ave., Montreal, Que.
Caron, René-E	Med. 4 (5 Yr. Course)	157 Wilbrod St., Ottawa, Ont.
Carpenter, Thayer Robinson	Ap. Sci. 4 (Me.)	Lachute Mills, Que.
Carroll, Austin Joseph	Law 3 (LL.B.)	Guelph, Ont.
Carsley, Samuel Haberer	Ap. Sci. 4 (Chem. Eng.)	31 Macgregor St., Montreal, Que.
Carson, Kenneth Brait	Arts P	Rexton, N.B.
Carter, Adery Isabel	Arts 1	52 Prince Arthur Ave., Toronto, Ont.
Carter, Kenneth LeMesurier	Com. 1	53 Belvedere Road, Westmount, Que.
Carter, John Wilbert	Dent. 4	Salisbury, N.B.
Carver, John Kenneth	Dent. 4	1669 Church Ave., Montreal, Que.
Case, Annie Wright	Com. 1	33 Duke St., St. Catharines, Ont.
ashin, Martin Francis	M ed. 5	Circular Road, St. John's, Nfld.

NAME	FACULTY AND YEAR	HOME ADDRESS
Casselman, Hyman	Med. 3	992 Cadieux St., Montreal, Que.
Cassidy, Creighton Richard	Dent. 3	171 Adam St., Montreal, Que.
Cassils, Ian Grant	Com. 1	Ste. Anne de Bellevue, Que.
Caswell, Clarence Fowler	Ap. Sci. 1	Windsor Mills, Que.
Cave, Allister Edward	Ap. Sci. 3 (Mi.)	3 Monroe St., St. John's, Nfld.
Center, Ervin Alfred	Med. 5	Lachute, Que.
Chabot, Arthur John	Ap. Sci. 2	475 Durocher Ave., Outremont, Que.
Chadsey, Louis Calvin	Med. 4 (5 Yr. Course)	12704-102nd Ave., Edmonton, Alta.
Chait, Samuel (Double Course.)	Arts 2	53 Mozart Ave. W., Montreal, Que.
Chalk, Mary Laura	Arts 2 (Hon.)	4951 Western Ave., Westmount, Que.
Chalker, Chauncey Richard	Ap. Sci. 2	Lake View Ave., St. John's, Nfld.
Challenger, Cecil Avelyn	Dent. 2	Basseterre, St. Kitts, B.W.I.
Chalmers, Frank Burne	Med. 3	1927 Angus St., Regina, Sask.
Chamberlain, Aubrey (Left Nov. 15th, 1922.)	Con. 2	312 Indian Road, Toronto, Ont.
Champion, Cecil Hugh	Ap. Sci. 4 (Ci.)	Chateauguay Basin, Que.
Chan, Qui Hin	Med. 4 (6 Yr. Course)	116 Chenneville St., Montreal, Que.
Charbonneau, Neopal	Law 2	9 Hope Ave., Montreal, Que.
Charland, Walter Edgar	Dent. 2	1137 Wellington St., Montreal, Que.
Charles, Ethelbert Donaldson	Med. 3	St. Georges, Grenada, B.W.I.
Charlton, Alice E.	Arts P	391 Wiseman Ave., Outremont, Que.
Charness, Isidore	Law 2	768 City Hall Ave., Montreal, Que.
Chase, Wallace Leslie	Arts 3 (B.Sc. Hon)	Barbadoes, B.W.I.
Chatters, Othello Pritchard	Med. 5	1867-Seventh Ave. E., Vancouver, B.C.
Chauvin, Frank Bernard	Law 2	720 Maplewood Ave., Outremont, Que.
Chave, Bertram William	Arts 3 (B.Sc.)	Woodlands, Que.
Chesley, Arthur Sharp	Med. 5 (5 Yr. Course)	69 Clarendon St., St. John, N.B.
Chestnut, Oswald Walter	Med. 5	Sussex, Kings Co., N.B.
Chisholm, Daniel Neil	Med. 4 (5 Yr. Course)	Port Hastings, N.S.
Chisholm, Gavin William	Med. 2	35 Aberdeen Ave., Westmount, Que.
Chisholm, Joseph Donald	Ap. Sci. 4 (El.)	Hawthorne St., Antigonish, N.S.
Choquette, Falconie	Med. 1	15 McDougall Ave., Ottawa, Ont.
Chorney, Melvin Mendel	Ap. Sci. 4 (Chem. Eng.)	1218 St. Denis St., Montreal, Que.
Cinq-Mars, Madelcine	Arts P	815 Hartland Ave., Outremont, Que.
Clare, Kenneth Ernest	Com. 1	361 Victoria Ave., St. Lambert, Que.
Clarke, Austin McMillan	Med. 4 (6 Yr. Course)	Newcastle, N.B.
Clark, Hugh Stuart	Arts 4	Kincardine, Ont.
Clarke, Percy Maxwell	Dent. 4	Newcastle, N.B.
Clarke, William Alexander	Ap. Sci. 1	267 Catherine St., Ottawa, Ont.
Cleland, John George P.	Med. 4 (5 Yr. Course)	Penticton, B.C.
Clement, Hugh Wilfred	Med. 4 (6 Yr. Course)	Chesterville, Ont.
Clendinnen, Ivan C.	Med. 4 (5 Yr. Course)	330 N. Brodie St., Fort William, Ont.
Cleveland, Edward Thorburn	Dent. 4	7 Lorne Ave., Montreal, Que.
Cleveland, Harry Roland	Ap. Sci. 4 (El.)	Danville, Que.
Cloutier, Asa F.	Pharmacy	Granby, Que.
Cloutier, Elfrid Bousquet	Pharmacy	Roxton Pond, Que.
Cloutier, George Edwin J.	Ap. Sci. 4 (Chem. Eng.)	2339 Park Ave., Montreal, Que.
Cochran, Thomas Patrick	Ap. Sci. 3 (Mi.)	Stoodley Knowle, Torquay, Eng.
Cochran, William Charles	Ap. Sci. 2	Sidney, Vancouver Island, B.C.
Code, William Harry	Arts 1 (B.Sc.)	26 Cornelia St., Smith's Falls, Ont.
Cohen, Bernard	Arts 3 (Hon.)	466 Wilson Ave., Montreal, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Cohen, Ethel Jetta	Arts 2	
(Double Course.)	(B.Sc.)	270 Mance St., Montreal, Que.
Cohen, Harry Aaron	Med. 1	89 Dorchester St. W., Montreal, Que.
Cohen, Hyman	Med. 1	161 Casgrain St., Montreal, Que.
Cohen, Isie Benzion	Arts P	1085 Clarke St., Montreal, Que.
Cohen, Jacob	Med. 4	
	(6 Yr. Course)	566 St. Dominique St., Montreal, Que.
Cohen, Lawrence Z	Law 3	25 Rosemount Ave., Westmount, Que.
Cohen, Nathan	Pharmacy 3	494 Clarke St., Montreal, Que.
Cohen, William Hyman	Pharmacy 1	914 c City Hall Ave., Montrea., Que.
Colby, Doris Gwendolin	Arts 2	
	(Hon.)	2197 Esplanade Ave., Montreal, Que.
Cole, Frederick Robert	Arts P	214 Bonnacord St., Moncton, N.B.
Coleman, Charles Lester	Com. 1	399 Decarie Blvd., Montreal, Que.
Collins, Frederick Thomas	Law 2	305 Grosvenor Ave., Westmount, Que.
Collins, Stanley Ralph	Arts 4	11 Third Ave., Ottawa, Ont.
Collins, William Henry	Arts 1	Gander Bay, Newfoundland.
Comeau, Robert Anthony	Dent. 1	Meteghan River, Digby Co., N.S.
Conn, Robert Stanley	Med. 2	Wolseley, Sask.
Connell, Gerald P	Ap. Sci. 4	
	(Chem. Eng.)	522 Gladstone Ave., Ottawa, Ont.
Connor, Gordon Myron	Ap. Sci. 2	32 Queen St., Sherbrooke, Que.
Conroy, Louis O'Neill	Med. 3	Raheen, Allandale Road, St. John's, Newfoundland.
Consiglio, Franco	Arch. 3	90 Milton St., Montreal, Que.
Converse, John Douglas	Ap. Sci. 1	Derby Line, Vt.
Cook, Maynard Stephen	Med. 5	33 Melgund Ave., Ottawa, Ont.
Cooke, Arthur Selwyn K	Arch, 2	153 Stanley St., Montreal, Que.
Cool, David Parker	Dent. 2	239 Archibald St., Moncton, N.B.
Cooney, George Edward	Arts P	150 Metcalfe St., Ottawa, On .
Cooper, Donald Frederick	Ap. Sci. 1	341 Metcalfe Ave., Westmou t,Que.
Cooper, Hugh Christopher D	Arch. 4	Petherton, Truro, England.
Cooper, Jack Roland	Ap. Sci. 3	
	(Me.)	Peruvian Corporation Ltd., Lima, Peru
Cooper, Gilbert Alexander	Com. 2	Hamilton, Bermuda.
Cooper, Paul Emerson	Ap. Sci. 4	
	(Ci.)	105 Lees Ave., Ottawa, Ont.
Cooper, Yetta	Arts P	285 de l'Epée Ave., Outremont, Que.
Coote, James Alexander	Arts P	7 Cedar Ave., Pointe Claire, Que.
Cope, Edward Selby	Ap. Sci. 2	460 Wood Ave., Westmount, Que.
Cope, Francis Campbell	Arts 3	
	(Hon.)	460 Wood Ave., Westmount, Que.
Copland, Charles Leslie	Arts 1	4307 Montrose Ave., Westmount, Que.
Copple, Benny	Arts 1	1270 Wellington St., Verdun, Que.
Cornell, Lyle Jackson	Ap. Sci. 3	
	(Mi.)	650 Grosvenor Ave., Westmount, Que.
Cossette, Paul-John	Law 1	Valleyfield, Que.
Cossman, Ethel	Arts 1	
	(B.Sc.)	704 Durocher Ave., Outremont, Que.
Costigan, James Percival	Ap. Sci. 1	494 Grosvenor Ave., Westmount, Que.
Cotnam, Harvey Alexander	Com. 1	Pembroke, Ont.
Cottee, Clifford H. F	Ap. Sci. 2	4 Capital Park, Ottawa, Ont.
Couper, Mildred Mary	Arts 1	663 St. Antoine St., Montreal, Que.
Cousens, Henry	Arts P	Bolton Centre, Que.
Couture, J.-Eugene	Ap. Sci. 2	322 St. Jean Baptiste St., Boniface, Man.
Covicy, Harry	Pharmacy	1259 Clarke St., Montreal, Que.
Cowan, David	Arts 4	
	(Hon.)	143 Stanley St., Montreal, Que.
Cowan, Reginald Barnes	Arts 1	
	(B.Sc.)	50 Bruce Ave., Westmount, Que.
Cowan, William Ernest	Med. 3	187 Waller St., Ottawa, Ont.
Cox, Leonard Gordon	Ap. Sci. 4	
(Left Jan. 1923.)	(Ci.)	305 First Ave., Ottawa, Ont.
Coyle, Hugh Francis	Ap. Sci. 1	Dundee, Que.
Craig, Francis St. Clair	Ap. Sci. 2	623 St. Joseph St., Lachine, Que.
Craig, Kenneth Lee	Med. 5	Olds, Alberta.
Craig, Shirley Abbott	Ap. Sci. 1	82 Third Ave., Ottawa, Ont.
Craig, Stanley B	Med. 2	2796 St. Catherine St., Montreal, Que.
Craik, Galen Howe	Arts 4	
	(Hon.)	Melbourne, Que.
Craik, Oliver Stanley	Ap. Sci. 4	
	(El.)	Melbourne, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Craik, Robert Lang	Arts 1	Chateauguay Basin, Que.
Crain, George Edwin	Ap. Sci. 4 (Ci.)	285 Clemow Ave., Ottawa, Ont.
Cram, Maxwell Albert	Ap. Sci. 2	Green's Harbour, Nfld.
Crawford, Alphonse Middleton	Med. 4 (5 Yr. Course)	1521-15th. Ave. E., Vancouver, B.C.
Crawford, Doris Gertrude	Arts 1	1040 Bernard Ave., Montreal, Que.
Crawford, Edwin Minter	Med. 3	43 Waverly Rd., Pointe Claire, Que.
Creelman, Alice B (Double Course)	Arts 2	Georgetown, Ont.
Creelman, (Mrs.) Virginia K. (Left Oct. 25th, 1922.)	Med. 4 (5 Yr. Course)	Georgetown, Ont.
Creery, Kenneth Andrew	Ap. Sci. 3 (Chem. Eng.)	1389 Jervis St., Vancouver, B.C.
Cregeen, Kenneth Thomas	Ap. Sci. 4 (El.)	1 Metcalfe St., Montreal, Que.
Crépeau, Louis	Ap. Sci. 1	28 Sherbrooke St. W., Montreal, Que.
Crestohl, Leon Dave	Law 3	489 St. Lawrence Blvd., Montreal, Que.
Crestohl, Max Nathan	Arts 4	489 St. Lawrence Blvd., Montreal, Que.
Crewson, Arthur Lewellyn	Med. 5	Alexandria, Ont.
Crocker, Willard Frederick	Med. 3	17 Park Lane, Quincy, Mass.
Crombie, Harry Norman	Ap. Sci. 1	Kingsbury, Que.
Cromwell Alexander Ross	Ap. Sci. 3 (Ci.)	Cookshire, Que.
Cross, Dorothy Alexandra	Arts 4	217 Labonté Ave., Longueuil, Que.
Cross, George Esplin	Ap. Sci. 4 (Me.)	369 Metcalfe Ave., Westmount, Que.
Crossley, Emily Helen (Double Course.)	Arts 3 (B.Sc. M.D.)	125 Strathearn Ave., Montreal West.
Crowe, Marguerite	Med. P	Physics Bldg., McGill University.
Cruickshank, John Merrill	Med. 4 (6 Yr. Course)	2 Olive, St., St. John W., N.B.
Culpeper, Bernard Armel	Ap. Sci. 4 (Ci.)	194 Villeneuve St. W., Montreal, Que.
Cummings, Benjamin A (Did not attend.)	Com. 1	16 Grey Ave., Montreal, Que.
Cummings Ralph (Left Mar. 3rd., 1923.)	Com. 1	16 Grey Ave., Montreal, Que.
Cunningham Ernest Kenneth	Med. 2	Carman, Man.
Curbelo, Pablo G	Med. 4 (6 Yr. Course)	Arecibo, Porto Rico.
Curren, William Murray	Med. 1	177 Princess St., St. John N.B.
Currie, George Reynolds	Com. 3	427 Third Ave., Saskatoon, Sask.
Curtis, Edwin Johnston	Med. 5	2406 Fifth Ave., W., Vancouver, B.C.
Curtis, Harry Croyle	Med. 4 (5 Yr. Course)	Somerset, Bermuda.
Curtis, Pierson Vivian	Ap. Sci. 4 (El.)	18 Gower St., St. John's, Nfld.
Curwell, Ann	Arts P	
Cuthbertson, Arnold Craig	Arts 1 (B.Sc.)	49 Glen Ave., Ottawa, Ont.
Cutting, Reginald Alex	Med. 5	11 Cherry St., W., Somerville, Mass.
Cuttle, William Gordon	Ap. Sci. 4 (Me.)	Hudson Heights, Que.
Dainow, Joseph	Arts 1	139 Laurier Ave. W., Montreal, Que.
Dalrymple, Edward Ross	Ap. Sci. 4 (El.)	617 Carleton Ave., Westmount, Que.
Danford, Percy Thomas	Ap. Sci. 1	354 Hingston Ave., Montreal, Que.
Daniels, Eli	Med. 2	1910 Esplanade Ave., Montreal, Que.
Darby, George Bishop	Med. 2	Long's Hill., St John's, Nfld.
d'Arcy, John Norman	Arts 1	342 Peel St., Montreal, Que.
Darling Arthur Balfour	Ap. Sci. 3 (Ci.)	73 St. Luke St., Montreal, Que.
Darling, James Douglas	Ap. Sci. 1	322 Old Orchard Ave., Montreal, Que.
Davey, Reginald Edgar (Left Oct. 10th, 1922.)	Arts P	33 Fairview Ave., Hamilton, Ont.
David, Russell Sullivan	Med. 2	San Fernando, Trinidad, B.W.I.
Davidson, Walter McDonald	Med. 5	Newton, Ont
Davidson, Stanley Cecil	Ap. Sci. 4 (Mi.)	520 Victoria Ave., Westmount, Que.
Davies, Clarence Bernard	Ap. Sci. 4 (Chem. Eng.)	162 Clemow Ave., Ottawa, Ont.

NAME	FACULTY AND YEAR	HOME ADDRESS
Davies, Thomas R.	Arts 1	Ste. Therese, Co. Terrebonne, Que.
Davis, Henry Roy Landerkin	Med. 2	Milner, B.C.
Davis, Hugh Peter	Med. 2	49 Pearl St. W., Brockville, Ont.
Davis, Laura Sophronia	Arts 2 (Hon.)	Arundel, Que.
Davis, Robert Bruce	Com. 1	37 Arthur St., Ottawa, Ont.
Davis, Roberts Samuel	Com. 2	157 Pretoria Ave., Ottawa, Ont.
Davis, Sydney Herbert	Ap. Sci. 4 (Mi.)	157 Pretoria Ave., Ottawa, Ont.
Davis, William Wallace	Ap. Sci. 4 (Met.)	37 Arthur St., Ottawa, Ont.
Dawson, Katherine Henderson	Arts 5	21 Bellevue Ave., Westmount, Que.
Dawson, Martin Henry	Med, 5	Truro, N.S.
Day, Edwin Ethelbert	Med. 4 (5 Yr. Course)	354-15th Ave. W., Vancouver, B.C.
Deavitt, John Brownlow	Dent. 3	1629 Bloor St. W., Toronto, Ont.
de Belle, John-Ernest	Med. 3	202 Dupuis Ave., Montreal, Que.
de Belle, Louis-Charles	Arts 2	202 Dupuis Ave., Montreal, Que.
de Boucherville, Marie	Arts P	1042 Dorchester St. W., Montreal, Que.
de Bury, Hamilton Visart	Arts 1	Ritz Carlton Hotel, Montreal, Que.
Dectar, Alferd Abram	Med. 1	172 Fairmount Ave. W., Montreal.
Deery, Florence H.	Arts P	85 Hutchison St., Montreal, Que.
De Haitre, Leo.	Med. 1	L'Orignal, Ont.
Delahay, James Reginald	Med. 4 (6 Yr. Course)	9 Allan Place, Ottawa, Ont.
Delcellier, Henry Aimé	Ap. Sci. 3 (Ci.)	833 Outremont Ave., Outremont, Que.
de Lorimier, Jos.-Alexandre F.	Ap. Sci. 1	399 Mackay St., Montreal, Que.
Demaray, John Franklin	MeW. 5 (5 Yr. Course)	Forest, Ont.
Demetre, Strato	Com. 1	303 Esplanade Ave., Montreal, Que.
Dempsay, Gordon Roberts	Med. 4 (6 Yr. Course)	Cochrane, Ont.
Denis, Bertrand Tyrrell	Ap. Sci. 4 (Mi.)	130 Maple Ave., Quebec, Que.
Dent, Douglas Peter	Ap. Sci. 3 (El.)	St. Sixte, Que.
de Salaberry, Bernard	Ap. Sci. 4 (Chem. Eng.)	245 Laurier Ave., Ottawa, Ont.
Desbarats, Harrison Jean	Ap. Sci. 4 (Chem. Eng.)	757 University St., Montreal, Que.
Desbarats, Lucien	Arts 2 (Hon.)	757 University St., Montreal, Que.
Desloover, Jean Albert R.	Ap. Sci. 4 (El.)	267 Peel St., Montreal, Que.
de Sola, Jessica Elvira	Arts P	594 Pine Ave. W., Montreal, Que.
de Sola, Raphael David	Com. P	594 Pine Ave. W., Montreal, Que.
Dewar, Gordon Melbourne	Arts 1	396 Wilbrod St., Ottawa, Ont.
Dewis, Edwin Harold	Ap. Sci. 4 (Me.)	Shubenacadie, Hants Co., N.S.
Dick, George McKinstry	Ap. Sci. 3 (Me.)	80 Frontenac St., Sherbrooke, Que.
Dickinson, Albert Godfrey	Ap. Sci. 4 (El.)	914-21st Ave. W., Vancouver, B.C.
Dier, Hilton Heber	Med. 4 (5 Yr. Course)	327-19th Ave. W., Calgary, Alta.
Diffley, John Walter	Com. 1	1777 Hutchison St., Montreal, Que.
Dineen, Frederick Joseph	Med. 3	Sussex, N.B.
Dineen, Matthew Henry	Ap. Sci. 3 (Ci.)	78 Durocher St., Montreal, Que.
Dingman, Robert Eric	Ap. Sci. 2	15 Roxboro Drive, Toronto, Ont.
Dinsmore, G. W. Hazen	Med. 1	St. Stephen, N.B.
Dinsmore, Jack Wilfrid	Dent. 3	St. Stephen, N.B.
Dionne, Roger-Adolphe	Med. 1	508 Cumberland St., Ottawa, Ont.
Dixon, Meredith Fred	Ap. Sci. 1	71 Grand Boulevard, Montreal, Que.
Djurichitch, Luka Stojan	Med. 1	Kremna, Uzice, Serbia.
Dobson, Joseph William	Med. 4 (6 Yr. Course)	Hillsboro, Albert Co., N.B.
Donawa, Victor Edson	Med. 2	Port of Spain, Trinidad, B.W.I.
Donegan, Maurice Lee	Dent. 3	Magog, Que.
Donnelly, James Henry	Ap. Sci. 2	344 Harvard Ave., Montreal, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Donnelly, Russell Henry	Med. 4 (5 Yr. Course)	827 Lorne Crescent, Montreal, Que.
Donohue, Edward William	Ap. Sci. 3 (Ci.)	85 St. Famille St., Montreal, Que.
Donovan, George James	Med. 4 (6 Yr. Course)	Main St., Woodstock, N.B.
Doran, Edward	Med. 1	20 Hodges St., North Andover, Mass.
Dorion, Marie M. M. (Left Oct. 13th, 1922.)	Arts P	1213 St. Germain St., St. Laurent, Que.
Dormer, William John S.	Ap. Sci. 4 (El.)	Lennoxville, Que.
Dorrance, Frank Sinton	Med. 4 (5 Yr. Course,)	Edmonton, Alta.
Doubilet, Hyman (Double Course)	Arts 2 (B.A., M.D.)	50 Suzanne St., Montreal, Que.
Doubliet, Sydney Irving	Med. 4 (6 Yr. Course)	50 Dante St., Montreal, Que.
Dougall, Margaret	Arts 1, 2	Ste. Anne de Bellevue, Que.
Douglas, Frances Isabelle	Law 3 (LL.B.)	79 Oriole Road, Toronto, Ont.
Douglas, Percy Livingston	Ap. Sci. 3 (El.)	2 Summerhill Ave., Montreal, Que.
Douglas, Robert Gordon	Med. 4 (5 Yr. Course)	8710-104th St., Edmonton, Alta.
Doushkess, Milton	Arts 1	4023 Dorchester St. W., Montreal, Que.
Dowd, Clinton Hamilton	Law 1 (LL.B.)	13 Third Ave., Ottawa, Ont.
Dowd, Joseph Everett	Med. 3	13 Third Ave., Ottawa, Ont.
Dowd, Kenneth Eardley	Med. 5	13 Third Ave., Ottawa, Ont.
Dowd, Thomas	Pharmacy 3	492 St. Denis St., Montreal, Que.
Dowling, Fred Vere	Med. 4 (6 Yr. Course)	Fine, New York.
Draper, William Banford	Med. 4 (5 Yr. Course)	Jackson St., Freehold, N.J.
Dreger, Harry Carl	Med. 2, 3	58 Courtland Ave. E., Kitchener, Ont.
Druckman, Isidor	Dent. 3	190 Pine Ave. E., Montreal, Que.
Drummond, Henry Andrew	Med. 4 (5 Yr. Course)	1 Deer Park Crescent, Toronto, Ont.
Du Berger, René	Med. 5 (5 Yr. Course)	118 King St. W., Sherbrooke, Que.
Dubitsky, Moses	Arts P	13 Evans St., Montreal, Que.
Dubord, Elianne	Arts 1	Durlingville, Alta.
Duchek, Francis Alexander (Left Nov. 21st, 1922.)	Ap. Sci. 1	833 Victoria Road, Sydney, C.B.
Duchemin, Ernest Parker	Ap. Sci. 3 (Mi.)	70 George St., Sydney, N.S.
Duff, David Alexander	Ap. Sci. 4 (Mi.)	Harbour Grace, Nfld.
Duffy, St. Clair	Med. 3	Kinkora, P.E.I.
Dufresne, Georges-Louis	Ap. Sci. 1	83 Hallowell Ave., Westmount, Que.
Dugan, James Lennox	Dent, 2, 3	2574 Park Ave., Montreal, Que.
Dujat, Alvin Gabriel	Med. 1	5th St., Bayside, Long Island, N.Y.
Dumouchel, René	Pharmacy 3	1288 St. Hubert St., Montreal, Que.
Duncan, Alexander M.	Med. 1	Campbellton, N.B.
Duncan, Stuart Macpherson	Com. 3	251 Clemow Ave., Ottawa, Ont.
Duncan, Garfield George	Med. 5	R.M.D. 2, Billing's Bridge, Ont.
Dunne, Francis Sidney	Med. 2	56 College Ave., Ottawa, Ont.
Dunne, Gerald P.	Med. 4 (5 Yr. Course)	St. Paul, Minn.
Dunton, Elise Warden	Arts 2	51 Trafalgar Ave., Montreal, Que.
Dunton, Roberta Rhuamie	Arts 1	51 Trafalgar Ave., Montreal, Que.
Duskes, Emile	Med. 5	1082 St. Lawrence Blvd., Montreal, Que.
Duval, Irene	Arts P	2130 Hutchison St., Outremont, Que.
Duvla, Robert Herbert	Arts 3 (B.Sc.)	17 Victoria St., St. Johns, Que.
Dworkin, Simon	Med. 2 Dent. 4	2226 St. Urbain St., Montreal, Que.
Dyer, Thomas Merton	Med. 5	Fleming, Sask.
Dyer, Warwick Stephen C	Arts 1 (B.Sc.)	40 High St., Georgetown, Demerara, British West Indies.
Dyer, William Robert	Med. 4 (5 Yr. Course)	Alberton, P.E.I.

NAME	FACULTY AND YEAR	HOME ADDRESS
Dyke, Meredith Harvie	Arts 3 (Hon.)	369 Lansdowne Ave., Westmount, Que.
Eadie, Thomas W.	Ap. Sci. 4 (Ci.)	1321 Wellington St., Ottawa, Ont.
Eager, Richard Frederick R.	Med. 4 (5 Yr. Course)	176 Second Ave., Ottawa, Ont.
Eakin, Vera Gwendolyn	Arts P	572 Roslyn Ave., Westmount, Que.
Eardley, Allworth	Arts P	996 Dorchester St. W., Montreal, Que.
Eardley, Evelyn Laura N.	Arts 2 (Hon.)	996 Dorchester St. W., Montreal, Que.
Easterbrook, John Edward	Ap. Sci. 1	932 Aylwin St., Montreal, Que.
Easson, John M.	Com. 3	23 Bedford Road, Toronto, Ont.
Eaton, George Outhit	Med. 4 (6 Yr. Course)	Truro, N.S.
Echenberg, Henry Lehrer	Law 2	60 Souvenir Ave., Montreal, Que.
Eddy, Earl Bronson	Arts 2	Grand St., Brantford, Ont.
Eddy, William Thomas	Arts P	Placentia Bay, Nfld.
Edgar,	Arts P	
Edward, Francis Alexander	Arts 2	Lacolle, Que.
Egerton, Norman	Arts 4 (Hon.)	862 Tupper St., Montreal, Que.
Ein, Abraham	Com. P	Glace Bay, N.S.
Ein, William Bernard	Med. 5	Glace Bay, N.S.
Elder, Herbert Munro	Med. 5	c/o Mrs. J. M. Elder, The Linton Apts., Montreal, Que.
Elderkin, Robert E.	Med. 4 (5 Yr. Course)	Wolfville, N.S.
Eldridge, Kenneth R. A.	Arts 1 (B.Sc.)	4 High St., St. John's, Antigua, B.W.I.
Elkington, Gerald Erlam	Ap. Sci. 4 (El.)	Oak Park, Duncan, B.C.
Elliot, Spencer Graham	Med. 4 (5 Yr. Course)	Forget, Sask.
Elliott, Erwin Hughes	Com. 1	6544 Maple St., Vancouver, B.C.
Elliott, James Munro	Med. 4 (5 Yr. Course)	1138 Matthews Ave., Vancouver, B.C.
Ellis, David Hepburn	Ap. Sci. 2	1 Church Hill, St. John's, Nfld.
Ellis, Mildred	Arts 1	1293 Clarke St., Montreal, Que.
Ellison, Albert	Arts 2 (Hon.)	258 Jeanne Mance St., Montreal, Que.
Ellison, Max	Arts 3 (Hon.)	258 Jeanne Mance St., Montreal, Que.
Ellman, Isidore	Med. 1	101 Paradise Row, St. John, N.B.
Elvidge, Arthur Roland	Med. 4 (5 Yr. Course)	2331 Mance St., Montreal, Que.
Emmons, William Frank	Med. 4 (5 Yr. Course)	1311 The Crescent, Shaughnessy Heights, Vancouver, B.C.
Emo, John Currie	Com. 3	4034 Dorchester St. W., Westmount.
Engelke, M. Evelyn	Arts P	4620 St. Catherine St. W., Montreal.
England, Esther Ritchie	Arst 2 (Hon.)	126 Bishop St., Montreal, Que.
Enzer, Emmanuel	Com. 2	Apt. 3, 75 Mt. Royal Ave. W., Montreal.
Enzer, Norbert	Med. 5	Apt. 3, 75 Mt Royal Ave. W., Montreal.
Epstein, Isidore Ben	Law 1	86 Milton St., Montreal, Que.
Epstein, Samuel	Arts 2	1655 Mance St., Montreal, Que.
Ereaux, Lemuel Price	Med. 5	463 Elm Ave., Westmount, Que.
Evans, Charles Durward	Ap. Sci. 3 (Me.)	19 Claire Fontaine St., Quebec, Que.
Evans, Annie Lorene	Arts 4 (Hon.)	40 Seeley St., St. John, N.B.
Evans, Otty Blair	Med. 5	40 Seeley St., St. John, N.B.
Evans, George Francis	Med. 5	St. Mary's, Ont.
Evans, Thomas Owen	Ap. Sci. 1	220 Prud'homme Ave., Montreal, Que.
Eve, Frank Maxwell	Ap. Sci. 2	Pembroke House, Richmond Green, Surrey, England.
Evelyn, Melville Desmond	Med. 1	187 Edgecombe Ave., New York, N.Y.
Everett, Charles Douglas	Arts 2 (Hon.)	St. Andrew's, N.B.
Everett, Herbert Stewart	Med. 5	St. Andrew's, N.B.
Fagan, James Wilfrid	Ap. Sci. 4 (Me.)	1899b St. Catherine St. E., Montreal, Quebec.

NAME	FACULTY AND YEAR	HOME ADDRESS
Fair, Louisa Margaret	Arts 4 (Hon.)	207 Mansfield St., Montreal, Que.
Fairbairn, John Macfarlane	Ap. Sci. 3 (Me.)	75 St. Luke St., Montreal, Que.
Fairbanks, Archibald Graham	Ap. Sci. 2	766 Sherbrooke St. W., Montreal, Que.
Fairman, Frederick William	Com. 1	28 Rosemount Ave., Westmount, Que.
Faith, Willard Vanamber	Ap. Sci. 4 (Met. Eng.)	Box, 381, Winchester, Ont.
Falconer, Harold Eugen J	Ap. Sci. 1	Laage, Naarderweg, Hilversum, Holland
Falconer, Keith	Arts 4	47 Arlington Ave., Westmount, Que.
Falls, Francis Cuthbert B	Com. 1	Amherstburg, Ont.
Fargey, Martha	Arts P	4845 Westmount Ave., Westmount, Que.
Farmer, Eric Westover	Ap. Sci. 3 (El.)	P.O.Box 111, Ste. Therese, Que.
Farmer, Walter David	Med. 3	Cumberland, Ont.
Farnworth, George Jarvis	Ap. Sci. 3 (Met. Eng.)	
Farrar, Norman	Ap. Sci. 2	Melbourne, Que.
Farrell, Alfred James	Ap. Sci. 3 (Me.)	4874 Westmount Ave., Westmount, Que.
Feeney, Neil	Med. 2	94 Pine Ave. W., Montreal, Que.
Fegen, Solomon	Med. 5	11 Vercheres Ave., Montreal, Que.
Feigenbaum, Jacob	Med. 4 (6 Yr. Course)	Apt. 3, 1281 St. Urbain St., Montreal.
Feilders, Mary Gwendolyn	Arts 3 (Hon.)	327 Wilson Ave., Montreal, Que.
Feilding, Charles Rudolph	Arts 2	4 Thompson St., Dartmouth, N.S.
Feldman, Jacob	Med. 5	148 St. Joseph Blvd. W., Montreal, Que.
Fellowes, Norton Alexander	Ap. Sci. 1	60 Nelson Ave., Outremont, Que.
Fels, Gerald Bernard	Dent. 4	612 Victoria Ave., Westmount, Que.
Fels, Moses Abraham	Law 2	87 Esplanade Ave., Montreal, Que.
Fels, Sol	Law 1	87 Esplanade Ave., Montreal, Que.
Ferguson, James Abner	Med. 4 (6 Yr. Course)	Cumberland, Ont.
Ferguson Percival Fergus	Arts P	Valleyfield, Que.
Ferguson, William Patterson	Ap. Sci. 3 (Mi.)	510 Gilmour St., Ottawa, Ont.
Fergusson, Ruth May	Arts 3 (Hon.)	4708 Western Ave., Westmount, Que.
Ferrabee, Francis Gilbert	Ap. Sci. 3 (Me.)	731 Sherbrooke St. W., Montreal, Que.
Fife, Jack Keith	Med. 4 (5 Yr. Course)	24 Lemarchand Apts., Edmonton, Alta.
Findlay, Robert Elliott	Ap. Sci. 1	Compton Station, Que.
Findlay, Stanley Peter	Med. 4 (6 Yr. Course)	1368 Hornby St., Vancouver, B.C.
Findlay, William Fraser	Ap. Sci. 3 (Me.)	Carleton Place, Ont.
Fineberg, Arnold Arthur	Com. 1	185 Esplanade Ave., Montreal, Que.
Fineberg, Maxwell	Med. 5	353 Olivier Ave., Westmount, Que.
Fineberg, Sadye	Arts P	185 Esplanade Ave., Montreal, Que.
Finkelstein, Moses (Double Course)	Med. 2 Arts 4 (B.Sc.)	1762 Clarke St., Montreal, Que.
Finkelstein, Norman Forman	Dent. 1	484 Champagneur St., Montreal, Que.
Finlayson, Archie Wallace	Ap. Sci. 3 (Ci.)	5989 Monkland Ave., Montreal, Que.
Finlayson, Harold Musgrave	Ap. Sci. 4 (Ci.)	5989 Monkland Ave., Montreal, Que.
Finlayson, Stuart Milner	Ap. Sci. 3 (El.)	2342 Hutchison St., Outremont, Que.
Finley, Frederick Lovell	Ap. Sci. 4 (Mi.)	273 Bishop St. Montreal, Que.
Finney, William Harper	Med. 2	1035 St. Viateur St., Montreal, Que.
Fisher, Frank Lemuel	Med. 4 (5 Yr. Course)	Truro, N.S.
Fisher, Trenholm Lawrence	Med. 2	231 Polson Ave., Winnipeg, Man.
Fitch, Esther	Arts 4	4910 Sherbrooke St. W., Westmount. Que.
Fitzmaurice, Lawrence Wylie	Med. 4 (6 Yr. Course)	New Glasgow, N.S.
Flaherty, John Renny	Arts 1	12 Fulton Ave., Sherbrooke, Que.
Flanagan, James Cyril	Dent. 4	2218 Mance St., Montreal, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Fleet, Jane Drummond	Arts P.	33 Ontario Ave., Montreal, Que.
Fleming, Canmore Drake	Ap. Sci. 3. (Me.)	1015 Sandwich St. W., Windsor, Ont.
Fleming, Kenneth Eldon	Ap. Sci. 4. (El.)	1015 Sandwich St. W., Windsor, Ont.
Foggo, Norman Oliphant M.	Ap. Sci. 3. (Met. Eng.)	918-20th Ave. W., Vancouver, B.C.
Fogul, Harry	Arts 1	89 Villeneuve St. W., Montreal, Que.
Forbes, Robert Clarence	Ap. Sci. 3. (Ci.)	423 Lansdowne Ave., Westmount, Que
Forrest, James Roberts	Med. 4. (6 Yr. Course)	191 St. Famille St., Montreal, Que.
Forrester, Alexander Vaughan	Med. 4. (5 Yr. Course)	1018 Amphion St., Victoria, B.C.
Forsey, Eugene Alfred	Arts 2. (Hon.)	187 Fourth Ave., Ottawa, Ont.
Forster, David Stewart	Med. 4. (6 Yr. Course)	262 Decelles Ave., Montreal, Que.
Forsyth, David Thomas I	Arts 2	432 Frontenac St., Montreal, Que.
Fortune, Robert V.	Arts 2	432 Wellington St., Sault Ste. Marie.
Foss, Donald Burrowes	Ap. Sci. 4. (Me.)	Ont. 2 Bellevue Ave., Sherbrooke, Que.
Foss, Lindsay Justin	Ap. Sci. 4. (Mi.)	297 Prince Arthur St. W., Montreal.
Foster, Frederick Lawton	Ap. Sci. 4. (El.)	Apt. 29, 376 Claremont Ave., Westmount, Que.
Foster, Joan Mary Vassie	Arts 4. (Hon.)	36 Coburg St., St. John, N.B.
Foster, Joseph Graeme	Med. 5	443 McLaren St., Ottawa, Ont.
Fotheringham, John Popham	Ap. Sci. 3, 4. (Me.)	824 Echo Drive, Ottawa, Ont.
Fotos, Helen	Arts 3. (Hon.)	693 Shuter St., Montreal, Que.
Fotos, John	Arts 3. (Hon.)	693 Shuter St., Montreal, Que.
Fowler, Alan Frederick	Med. 2	542 King Edward Ave., Ottawa, Ont.
Fowler, Douglas Bradshaw	Med. 4. (6 Yr. Course)	Raymond, Alberta.
Fox, George Lefferts	Med. 4. (5 Yr. Course)	Hartford, Conn.
Fox, Tovia	Med. 1	198 St. Joseph Blvd. W., Montreal, Que.
Foy, Albert Joseph	Ap. Sci. 3	71 Clandeboye Ave., Westmount, Que.
Frank, Moses	Law 2. (LL.B.)	1877 St. Urbain St., Montreal, Que.
Frankel, Adella	Arts P	157 Roy St., Montreal, Que.
Franklin, Richard Eben	Arts 2	Maxville, Ont.
Franklin, Samuel Benjamin	Com. 3	2160 Waverley St., Montreal, Que.
Fransblow, Edward	Arts 1	Tracadie, N.B.
Fraser, Clarence Harrower	Arts 4. (Hon.)	350 Mackay St., Montreal, Que.
Fraser, Donald Scott	Med. 4. (5 Yr. Course)	Box 520, New Glasgow, N.S.
Fraser, James Oliphant	Med. 4. (5 Yr. Course)	236 Duckworth St., St. John's, Nfld.
Fraser, Simon Bartlett	Med. 1	Williamstown, Ont.
Fraser, William Allan	Med. 5	Rockland Ave. & St. Charles St., Victoria, B.C.
Freedman, Ernest Orkin	Arts 2. (Hon.)	366 Kensington Ave., Westmount,Que.
Freedman, Joseph	Med. 4. (5 Yr. Course)	173 George V St., Lachine, Que.
Freedman, Leon Dave	Arts 2	716 Colonial Ave., Montreal, Que.
Freedman, Lewis Kellert	Law 3	86 Park Ave., Montreal, Que.
Freedman, Margery Adele	Arts P	439 Prince Albert Ave., Montreal, Que.
Freedman, Newman Barnett	Med. 5	86 Park Ave., Montreal, Que.
Freedman, Pearl Riva	Arts 1	366 Kensington Ave., Westmount, Que.
Freeman, Harold Sydney	Arts 4	1874 Esplanade Ave., Montreal, Que.
Freeze, Vivien	Arts P	Royal Victoria Hospital, Montreal,Que.
Freyvogel, Charlotte Rosalie	Arts 4. (B.Sc.)	162 Villeneuve St. W., Montreal, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Friedman, Abraham Harry	Com. 1	
(Left Nov. 30th, 1922.)		186 Ninth Ave. W., Longueuil, Que.
Friedman, Edward Adolphe	Com. 2	318 Elm Ave., Westmount, Que.
Friedman, Victor Edward	Ap. Sci. 3, 4 (Me.)	322 Elm Ave., Westmount, Que.
Friedman, William	Com. 3	54 Chateaubriand Ave., Montreal, Que.
Frohlich, Louis Isidore	Arts 2	
(Double Course.)	(B.Sc., M.D.)	1656 Clarke St., Montreal, Que.
Fry, Edmund Botterell	Ap. Sci. 3 (Me.)	29 Bellevue Ave., Westmount, Que.
Fry, Mary Inez	Arts 4 (Hon.)	29 Bellevue Ave., Westmount, Que.
Fullerton, Charles Watson	Med. 3	57 Clandeboye Ave., Westmount, Que.
Fulmer, Frank Douglas	Med. 4 (5 Yr. Course)	Edson, Alberta.
Furness, George Winston	Ap. Sci. 3 (El.)	Vernon, P.E.I.
Gaboury, Marcel	Law 1	324a St. Catherine St. W., Montreal.
Gaboury, Maurice-Albert	Com. 3	324a St. Catherine St. W., Montreal.
Gaetz, Thomas Harold	Med. 4 (5 Yr. Course)	Red Deer, Alberta.
Galipeau, Edwin-Joseph-L	Pharmacy 1	506 Moreau St., Montreal, Que.
Galipeau, John-Albert	Med. 1	506 Moreau St., Montreal, Que.
Gallay, Esther	Arts 2 (B.Sc.)	117 St. Joseph Blvd. W., Montreal, Que.
Galley, Harry A	Com. 2	Vankleek Hill, Ont.
Gamble, Robert Bruce	Ap. Sci. 4 (Met. Eng.)	315 Cooper St., Ottawa, Ont.
Gamble, William Charles S	Com. 3	52 Powell Ave., Ottawa, Ont.
Gameroff, Myer	Law 1	83a Seventh Ave., Lachine, Que.
Garcin, Cecil Redvers	Med. 3	Bonne Bay, Nfld.
Gardner, Abram	Com. 1	96 King St., Quebec, Que.
Gardner, Edwin Alexander	Arch. 1	119 Broadway Ave., Ottawa, Ont.
Gardner, Eugene Lewis		
(Left Oct. 28th, 1922.)	Arts 1	Apt. 2, 105 Fort St., Montreal, Que.
Gardner, William Harvey	Arts 2	Pekisko, Alberta.
Garelick, Alexander	Arts 1	2055 Clarke St., Montreal, Que.
Garrioch, Heury Gordon	Med. 5	Wainwright, Alberta.
Garson, Benjamin Alexander	Arts 1	8 St. Paul St., St. John, N.B.
Goslin, Thomas James	Med. 3	North Lacaster, Ont.
Gateley, Jerome Joseph	Med. 2	95 Hutchison St., Montreal, Que.
Gatenby, Ellis	Dent. 2	P.O. Box 1081, North Bay, Ont.
Gaudet, Gaston	Ap. Sci. 4 (El.)	Strathmore, Que.
Gaukrodger, Clement	Arts P	Greenfield Park, Que.
Gault, Carroll Lever	Com. 3	305 Stanley St., Montreal, Que.
Gauthier, Donat Auguste	Ap. Sci. 2	25 Regent St., Ottawa, Ont.
Gauthier, Maurice Chénier	Com. 3	2374 Hutchison St., Montreal, Que.
Gauthier, Paul	Law 1	690 Sherbrooke St. W., Montreal, Que.
Gavsie, William Harold	Med. 2	790 Victoria Road, Sydney, N.S.
Geddes, Aubrey Kent	Med. 4 (5 Yr. Course)	Truro, N.S.
Geddes, Lloyd Fulton	Ap. Sci. 3 (El.)	Great Village, N.S.
Gegg, Richard Conrad	Ap. Sci. 4 (Mi.)	Hongkong, China.
Gelineau, Joseph Campbell	Arts 1	895 Cobb Blvd., Kankakee, Ill.
Gemeroy, Joseph Conrad	Med. 3	Winchester, Ont.
Gentle, Floyd Gardner		
(Left Jan. 24th, 1923.)	Ap. Sci. 1	Huntingdon, Que.
Gerdy, Isidor	Arts P	500 Claremont Ave., Westmount, Que.
German, Leland Eile	Med. 4 (5 Yr. Course)	248 Mountain St., Montreal, Que.
Geshelin, Harry Israel	Med. 5	2533-12th Ave., Regina, Sask.
Gibb, Ethelwyn Elizabeth	Arts P	131 Clandeboye Ave., Westmount, Que.
Gibbon, Murray Fox	Arts 3 (Hon.)	Ste. Anne de Bellevue, Que.
Gibbons, Emma Culross	Med. 5	1592 Highland Ave., Rochester, N.Y.
Gilbert, Edgar Valentine	Ap. Sci. 4 (Ci.)	P.O. Box 2473, Montreal, Que.
Giles, Bevans Henry Drummond	Ap. Sci. 2	Apt. 3, 1036 Dorchester St. W., Montreal, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Gillespie, Mildred Rice	Arts 1	Abbotsford, Que.
Gillett, George Herbert	Ap. Sci. 3 (El.)	7 Weredale Park, Westmount, Que
Gilletz, Colly	Ap. Sci. 1	2372 Waverley St., Montreal, Que
Gillies, Helen Mackechnie	Arts 3	205 Mance St., Montreal, Que.
Gillies, James Noel	Med. 3	Port Daniel Centre, Que.
Gillis, Nora Peter	Med. 5	1730-24th St. W., Calgary, Alta.
Gillson, Reginald Eric	Med. 2	591 University St., Montreal, Que.
Gilman, Mabel Phinney	Arts 1	Box 186, La Tuque, Que
Gilmour, William Alexander T	Ap. Sci. 2	30 Undermount Ave., Hamilton, Ont.
Gilpin, Alfred Oliver	Com. 2	12 Bishop St., Montreal, Que.
Gilson, Kenneth Livingstone	Com. 1	Waterville, Que.
Gincherman Abie	Med. 4 (5 Yr. Course)	1511 Mance St., Montreal, Que.
Ginn, George Willis Chandler	Arts 4	Richmond Que.
Ginsberg, Reuben	Pharmacy 3	2075 Hutchison St., Montreal, Que.
Gittleson, David A	Com. 2	Box 547, St. John's, Nfld.
Glasberg, Clara	Arts P	5 Deacon Road, Montreal, Que.
Glassco, John Grant	Com. 1	2 Evergreen Place, Winnipeg, Man.
Glassco, William Girdlestone	Med. 2	242 James St. S., Hamilton, Ont.
Glaser, Louis	Law 2	33 Chaboillez Square, Montreal, Que.
Glickman, Beatrice	Arts P	328 Redfern Ave., Westmount, Que.
Glickman, Harry	Med 4 (6 Yr. Course)	328 Redfern Ave., Westmount, Que.
Glickman, Herbert Lionel	Com. 1	354 Redfern Ave., Westmount, Que.
Glickman, Theresa	Arts P	320 Elm Ave., Westmount, Que.
Goddard, Arthur Laurence	Med. 2	"Sunnyside" Fontabelle, Barbados, B.W.I.
Godet, Thomas Martin du Brois	Ap. Sci. 1 Arts P	"Girvan" Paget, Bermuda.
Godine, Frank Melvyn	Arts 1	11 Souvenir Ave., Montreal, Que.
Gold, Solomon	Med. 5	638 St. Andre St., Montreal, Que.
Goldapple, Jack	Pharmacy 2	66 St. Marguerite St., Quebec, Que.
Goldberg, Harold Arnold	Dent. 2	1529 Park Ave., Montreal, Que.
Goldberg, Harry Julius	Ap. Sci. 4 (El.)	673 St. Lawrence St., Montreal Que.
Goldberg, Joseph	Med. 1	2697 St. Hubert St., Montreal, Que.
Goldberg, Louis	Med. 5	1662 Clarke St., Montreal, Que.
Goldblatt, Aaron (Double Course B.A. M.D.)	Med. 2 Arts 4	841 Cadieux St., Montreal, Que.
Golden, Bennie D	Com. 1	72 Bagg Ave. Montreal Que.
Goldenberg, Max	Dent. 2	1555 Esplanade Ave. Montreal, Que.
Goldenberg, Moses	Arts P	Campbellton, N.B.
Goldie, Alexander Gibson	Ap. Sci. 1	1 Brant Road, Galt, Ont.
Goldman, Ephraim Julius	Med. 5	816 Almond St., Syracuse, N. Y.
Goldman, Louis	Med. 4 (6 Yr. Course)	104 Laval Ave., Montreal, Que.
Goldsmith, Joseph Harold	Com. 3	272 Murray St., Ottawa, Ont.
Good, George Alvah	Med. 3	153 Regent St., Fredericton, N.B.
Goodall, Ernest Lorne	Ap. Sci. 3 (Me.)	60 Buena Vista Road, Rockcliffe, Ottawa, Ont.
Goodchild, Charles Edward	Com. 1	15 Garner St., So. Norwalk, Conn.
Goodhart, Annie Naomi	Arts P	857 St. Dominique St., Montreal, Que.
Goodkowsky, Isabella M	Com. 3	421 Mt. Pleasant Ave., Westmount,Que.
Goodman, Lawrence	Dent. 2	575 Cadieux St., Montreal, Que.
Goodnoh, Scott Tracy	Dent. 1	37 Oliver St., Cambridge, Mass.
Gordon, Charles Howard	Ap. Sci. 3 (Mi.)	1018 Queen Mary Road, Montreal,Que.
Gordon, Harold Cowan M	Ap. Sci. 4 (Mi.)	Box 117, Glace Bay, N.S.
Gordon, John	Ap. Sci. 2	1018 Queen Mary Road, Montreal, Que.
Gorelick, Eli	Med. 4 (5 Yr. Course)	517 Manitoba Ave., Winnipeg, Man.
Gornitsky, Israel	Dent. 2	20 Rivard St., Montreal, Que.
Gorrie, Dorothy	Arts P	2262 Hutchison St., Outremont, Que.
Gorrie, Graeme Yates	Arts 1	27 Winchester St., Toronto, Ont.
Goucher, Henry Gordon	Com. 2	Middleton, N.S.
Gourlay, William Lowry	Arts 2	Carp, Ont.
Gouzopulos, John G	Med. P	798 Sherbrooke St. E., Montreal, Que.
Gow, James Sinclair	Com. 3	215 Park St. W., Windsor, Ont.
Grace, Martin James	Dent. 1	Killaloe, Ont.

NAME	FACULTY AND YEAR	HOME ADDRESS
Grace, William John	Dent. 1	Corkery, Ont.
Gradinger, Bernard Lazarus	Arts 1	106 Bourget St., Montreal, Que.
Gradinger, Charles Hyman	Med. 4 (6 Yr. Course)	106 Bourget St., Montreal, Que.
Gradinger, Samuel	Med. 1	106 Bourget St., Montreal, Que.
Graham, Angus Murdock	Com. 3	Scotstown, Que.
Graham, Ernest Edward	Med. 3	Westboro, Ont.
Graham, Ethel Gordon	Arts P	2220 Cypress St., Vancouver, B.C.
Graham, Gerald	Com. P	778 St. Urbain St., Montreal, Que.
Graham, George Patterson	Ap. Sci. 4 (Chem. Eng.)	2 Abercrombie Road, New Glasgow, N.S.
Graham Howard Carson	Med. 4 (5 Yr. Course)	Kemptville, Ont.
Graham, Muriel Jean	Arts 2	Arundel, Que.
Graham, Walter White	Ap. Sci. 2	593 Seventh Ave., Rosemount, Que.
Granger, Marjorie	Arts 2 (Hon.)	696 Victoria Ave., Westmount, Que.
Granik, Abraham	Ap. Sci. 2	437 Esplanade Ave., Montreal, Que.
Grant, Alan Fraser	Arts 1	25 Cluny Ave., Toronto, Ont.
Grant, Alexander James	Ap. Sci. 4 (El.)	228 Church St., Moncton, N.B.
Grant, Elizabeth Rhoda	Arts 3 (Hon.)	95 McCulloch Ave., Outremont, Que.
Grant, Grainger Stewart	Ap. Sci. 4 (Mi.)	Government House, Halifax, N.S.
Grant, Samuel Constantine	Med. 1	Frankfield P.O., Clarendon, Jamaica, British West Indies.
Grant, William Harold Skeith	Dent. 1, 2	4332 Montrose Ave., Westmount, Que.
Grassick, Gordon Henry	Med. 3	1604-16th Ave., Regina, Sask.
Gravell, Arthur Lafayette	Ap. Sci. 3 (El.)	451 Clarke Ave., Westmount, Que.
Gray, Donald Alexander	Ap. Sci. 2	976 Tupper St., Montreal, Que.
Gray-Donald, Erceldoune	Ap. Sci. 2	Jaffa, Palestine.
Greaves, Harold Layland	Dent. 2	508 Victoria Ave., Westmount, Que.
Greeley, Philip Herzog	Arts P	2632 Garfield St., Washington, D.C.
Greenberg, Harry	Ap. Sci. 2	1088 St. Dominique St., Montreal, Que.
Greenblatt, Michael	Arts 3 (Hon.)	215 Esplanade Ave., Montreal, Que.
Greene, Eileen Christina	Com. 1	8231-106th St., Edmonton, Alta.
Green, John Loder	Med. 2	5 Talbot St., Brantford, Ont.
Greenspoon, Saul George	Pharmacy 2	30 de Grandpré St., Montreal, Que.
Gregson, William Ewart	Med. 3	1415 Fort St., Victoria, B.C.
Greer, William Mills	Med. 2, 3	4289 Dorchester St., Westmount, Que.
Grier, George Arthur	Arts 1	65 Ontario Ave., Montreal, Que.
Griffin, Winnifred	Arts 1	20 Bayle St., Montreal, Que.
Griffith, James Jeffrey	Med. 4 (5 Yr. Course)	221 Peel St., Montreal, Que.
Griffith, Thomas Raymond	Ap. Sci. 4 (Chem. Eng.)	796 Durocher Ave., Outremont, Que.
Grigg, Mildred McIntire	Arts 4 (Hon.)	631 Roslyn Ave., Westmount, Que.
Grimes, Francis Patrick (Left Jan. 24th, 1923.)	Ap. Sci. 1	550 Gilmour St., Ottawa, Ont.
Grimson, George Andrew	Com. 1	328 Hingston, Ave., Montreal, Que.
Gross, Munsey Edward	Dent. 4	1658 Jeanne Mance St., Montreal, Que.
Gross, Philip Norcross	Ap. Sci. 2	149 Drummond St., Montreal, Que.
Grossman, Albert	Dent. 4	912 Dorion St., Montreal, Que.
Grossman, Myer	Med. 2	612 City Hall Ave. Montreal, Que.
Groves, John Carman	Med. 2	295 Clemow Ave., Ottawa, Ont.
Gruber, Arthur Saul	Med. 5	197 Drolet St., Montreal, Que.
Gumlich, Nora G	Arts P	157 Grey Ave., Montrea, Que.
Gundesen, Christian Neils	Med. 5	Innisfail, Alberta.
Gunn, William George	Med. 4 (5 Yr. Course)	546 Broadway W., Vancouver, B.C.
Gurd, Jean Marjorie S	Arts 2 (Hon.)	124 Bishop St., Montreal, Que.
Guy, George Franklyn	Com. 1	451 Echo Drive, Ottawa, Ont.
Gwyn, Cyril Postle	Arts P	74 Court St., Sherbrooke, Que.
Hague, Edward Cousins	Ap. Sci. 4 (El.)	772 Dorchester St. W., Montreal, Que.
Hainlen, Edgar Willis	Med. 4 (5 Yr. Course)	Lake Placid, N.Y.

NAME	FACULTY AND YEAR	HOME ADDRESS
Hall, Alan Beardmore	Med. 2	512 Albert St., Nanaimo, B.C.
Hall, Earle Reginald	Med. 4 (5 Yr. Course)	Nanaimo, B.C.
Hall, Edmund Brinton	Med, 3	Bridgetown, N.S.
Hall, Henry Foss	Arts P	61 Frontenac St., Sherbrooke, Que.
Hall, Noel Bathurst	Med. 2	Kaslo, B.C.
Hall, Norman Douglas	Med. 3	598 Albert St., Nanaimo, B.C.
Halpenny, Merle B	Ap. Sci. 2	2248 Mance St., Montreal, Que.
Halperin, Hyman Mordecai	Med. 4, 5	1461 St. Lawrence Blvd., Montreal,Que.
Halperin, Joshua Sydney	Med. 4 (6 Yr. Course)	1461 St. Lawrence Blvd., Montreal, Que.
Hambly, Frank Yates	Ap. Sci. 2	Buckingham, Que.
Hambly, John Arthur	Arts 1 (B.Sc.)	Buckingham, Que.
Hamel, Albert	Ap. Sci. 3, 4 (Ci.)	50 Notre Dame St., Three Rivers, Que.
Hamilton, Desmond Russell	Com. 2	203 Richardson Bldg., 119 Bay Street, Toronto, Ont.
Hamilton, Eleanor	Arts P	287 Mountain St., Montreal, Que.
Hamilton, Frederick Wright	Ap. Sci. 1	515 Victoria Ave., Westmount, Que.
Hamilton, John Stewart M	Med. 2, 3	2756 Christophe-Colomb St., Montreal.
Hamilton, Robert McLean P	Ap. Sci. 2	Midvale, Utah.
Hamilton, Ronald Lorne	Med. 5	Berkely Cottage, Bushey Heath, Herts, England.
Hamilton, Robert Stanford	Med. 4 (5 Yr. Course)	1420 Fort St., Victoria, B.C.
Hamilton, William Brooks	Ap. Sci. 1	2756 Christophe-Colomb St., Montreal.
Hamman, Harold Alfred	Med. 5	Taber, Alberta.
Hammond, William	Me. 2	245 W. 261st St., New York City.
Hampson, Harold Ralph	Arts 3 (Hon.)	7 Ontario Ave., Montreal, Que.
Hanna, Robert James E	Med. 2	Perth, Ont.
Hannen, Charles Scott	Arts 4 (B.Sc. Hon.). Ap. Sci. P	19 Drummond St., Montreal, Que.
Hansard, Hugh Gerard Hazen	Law 1	48 Linton Apts., Sherbrooke St. W., Montreal, Que.
Harbert, Edward Thomas	Ap. Sci. 4 (Me.)	284 Marlowe Ave., Montreal, Que.
Harbottle, Edwin Clendon	Med. 2	Gainsborough, Sask.
Harding, Thomas Ernest W	Med. 3	43 King St. W., Brockville, Ont.
Hare, Patrick John	Ap. Sci. 2	11a Eccleston St., London S.W.1. Eng.
Harkness, Andrew Ross	Ap. Sci . 1	445 Wellington St., Sarnia, Ont.
Harling, Frank Norman	Ap. Sci. 4 (Ci.)	205 Westmount Blvd., Westmount, Que.
Harris, Arthur	Med. 1	2429 Notre Dame St. W., Montreal.
Harris, Austin Stirling	Ap. Sci. 1	198 Beaconsfield Ave., Montreal, Que.
Harris, Louis Sydney	Med. 4 (6 Yr. Course)	375 Lisgar St., Ottawa, Ont.
Harris, Saul	Dent 4	25 Craig St. W., Montreal, Que.
Harris, Theodore Herbert	Arts 1	2678 Park Ave., Montreal, Que.
Harrison, Isadore (Left Oct. 11th, 1922.)	Dent. 1	Brainard Station, N.Y.
Harrison, Jack Elmer	Med. 5 (5 Yr. Course).	1457-33rd Ave., Vancouver, B.C.
Hart, Francis Bruce	Arts 1 (B. Sc.)	Hackensack, N.J.
Hart, Gordon David	Com. 2	600 Argyle Ave., Westmount, Que.
Hart, Grace	Arts 1	757 Lansdowne Ave., Westmount, Que.
Harvey, G. Douglas	Ap. Sci. 1	Apple Grove Farm, Tomifobia, Que.
Harwood, Margaret Jean	Arts 1	9 Markham Road, Town of Mount Royal, Montreal, Que.
Harwood, William Liddell	Med. 5	9 Markham Road, Town of Mount Royal, Montreal, Que.
Hasley, Isobelle Jean (Left Nov. 17th, 1922.)	Arts 1	1328 Lajoie Ave., Outremont, Que.
Hatcher, William S	Arts 3	Rose Blanche, Newfoundland.
Hawley, Laurance E	Med. 1	Clarenceville, Que.
Hay, Dorothea Jane	Arts 3 (Hon.)	654 Dallas Road, Victoria, B.C.
Hay, James Cecil	Med. 5	654 Dallas Road, Victoria, B.C.

NAME	FACULTY AND YEAR	HOME ADDRESS
Hay, John Stuart	Arts 1	Lachute, Que.
Hayes, Albert John (Left October 1922.)	Arts P	413 W. Genesee St., Syracuse, N.Y.
Hayes, Harrison Cooley	Com. 1	Frelighsburg, Que.
Hayes, Martin	Pharmacy 3	492 St. Denis St., Montreal, Que.
Hayes, Robert Thomas	Med. 2	1 Mt. Pleasant Ave., St. John, N.B.
Hayes, Roland Earle	Ap. Sci. 3	329 James St., Ottawa, Ont.
Hearn, James Gabriel	Ap. Sci. 1	84 Grande Allée, Quebec, Que.
Heeney, Carden Thomas	Ap. Sci. 1	240 Powell Ave. Ottawa, Ont.
Heft, Henry	Arts P	165 Laval Ave., Montreal, Que.
Heilig, Harry (Left Oct. 30th, 1922.)	Com. 1	29 West Demontigny St., Montreal, Que.
Helal, Joseph	Arts P	112 St. Timothee St., Montreal, Que.
Held, Albert	Arts 1	1922 Mance St., Montreal, Que.
Held, Samuel	Pharmacy	1922 Mance St., Montreal, Que.
Helfield, Jacob Moses	Arts 1	875a Henri Julien Ave., Monreal, Que.
Heller, Harry Samuel	Med. 5	Apt. 1, 442 Henri Julien Ave., Montreal.
Henderson, Ian Gordon	Ap. Sci. 1	Williamstown, Ont.
Henderson, John Stanley	Med. 3	Chilliwack, B.C.
Henderson, Kenneth Armstrong	Com. 1	36 Brant Road N., Galt, Ont.
Henderson, Peter	Dent. 2	Box 488, Dundas, Ont.
Henderson, Reginald Smith	Med. 4 (5 Yr. Course)	Merigomish, Pictou Co., N.S.
Heneker, Dorothy Alice	Law 2 (LL.B.)	453 Mackay St., Montreal, Que.
Henry, Hugh George	Pharmacy 2	218 Union Ave., Montreal, Que.
Henry, John Stewart	Med. 4 (5 Yr. Course)	Salisbury, N.B.
Henry, Reginald Barrett	Med. 4 (6 Yr. Course)	258 Oxford Ave., Montreal, Que.
Henry, William Addison	Med. 4 (5 Yr. Course)	Gadsby, Alberta.
Herbert, Charles Henry	Com. 1	c/o Rev. F. F. Herbert, Hemingford Rectory, St. Ives, Hants., Eng.
Herman, Morris	Med. 3	2366 Clarke St., Montreal, Que.
Heron, Herbert George	Arts 4 (Hon.)	Billing's Bridge, Ont.
Herscovitch, Charles H	Ap. Sci. 2	1088 St. Urbain St., Montreal, Que.
Herscovitch, Harold	Dent. 2	1088 St. Urbain St., Montreal, Que.
Hershon, Henry Azov (Double Course.)	Med. 3 Arts 4	1402 Clarke St., Montreal, Que.
Hershon, Samuel	Dent. 3	1402 Clarke St., Montreal, Que.
Herzberg, Emmy Lou	Arts 3 Med. 1	348 Kensington Ave., Westmount, Que.
Hewetson, William James C	Arts 1	130 Mountain St., Montreal, Que.
Hibbard, Rodger James B	Med. 4 (5 Yr. Course)	332-12th Ave. N.W., Calgary, Alta.
Higgerty, Henry Bradley	Ap. Sci. 3 (Chem. Eng.)	105 Waverley St., Ottawa, Ont.
Higgins, John Kerr	Dent. 3	397 Main St., St. John, N.B.
Higginson, Isabelle Fernie	Com. 2	Buckingham, Que.
Higginson, Margaret Cumming	Arts 1 (B.Sc.)	Buckingham, Que.
Higinbotham, Norman L (Double Course.)	Arts 4 Med. 3	620-12th St. S., Lethbridge, Alta.
Hill, Albert Griffin	Med. 3	Box 142, Fergus, Ont.
Hill, Emerson Stanley	Med. 5	123 Third Ave., Ottawa, Ont.
Hill, Isabel Marion E	Arts 4	Richmond, Que.
Hill, Nicholas Parsell	Med. 4 (6 Yr. Course)	361 Kensington Ave., Westmount, Que.
Hill, Sara W. (Double Course, B.A., M.D.)	Arts 2	366 Metcalfe Ave., Westmount, Que.
Hilton, George Edward M	Med. 4 (6 Yr. Course)	126 Lewis St., Ottawa, Ont.
Hird, Eileen Margaret	Arts 1	590 Lansdowne Ave., Westmount, Que.
Hodgson, Duncan McIntyre	Com. P	291 Drummond St., Montreal, Que.
Hodina, Frank Albert	Ap. Sci. 1	2590b Waverley St., Montreal, Que
Hogle, Mrs. Annie	Arts P	1681 St. Urbain St., Montreal, Que.
Hoichberg, Louis	Pharmacy	1679 Hutchison St., Montreal, Que.
Holden, John Hastie	Ap. Sci. 4 (Me.)	321 Kensington Ave., Westmount, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Holland, Charles Antliff		
(Double Course, B.Sc., M.D.)	Arts 3	123 The Boulevard, Westmount, Que.
Holland, Catherine Nisbet	Arts P	Westville, N.S.
Holland, Edwin	Ap. Sci. 3 (Mi.)	15 Regent St., Leamington Spa, Warwickshire, England.
Holman, Henry Stewart	Ap. Sci. 1	3022 Granville St., Vancouver, B.C.
Holmes, Thomas Carlyle	Med. 4 (5 Yr. Course.)	1472 Beach Drive, Victoria, B.C.
Holtham, Hubert R. F.	Arts 4	
(Died Oct. 29th, 1922.)	(Hon.)	Waterville, Que.
Hooker, Lawrence Thomas	Med. 1	Huntingdon, Que.
Hooper, William Henry	Ap. Sci. 2	May, Idaho.
Hooper, Willis Mathieu	Dent. 4	Brownsburg, Que.
Hoover, Edward Philip	Arts 2	305 Bourbonnière St., Montreal, Que.
Hope, John Donaldson	Med. 4 (6 Yr. Course)	Lachute, Que.
Hopper, Ronald Victor	Ap. Sci. 2	Westboro P.O., Ont.
Horsey, Richard Mountstephen	Ap. Sci. 4 (El.)	1729 De la Roche St., Montreal, Que.
Horwood, Cyril Frederick	Com. 3	Water St., W., St. John's, Nfld.
Hosang, Samuel Alfred B.	Med. 4 (6 Yr. Course)	18 Picton St., Trinidad, B.W.I.
Houghton, Edward Oliver	Arts 2 (Hon.)	293 Hingston Ave., Montreal, Que.
Hovey, Lindsay Mansur	Ap. Sci. 2	833 McMillan Ave., Winnipeg, Man.
Howard, Cecil	Ap. Sci. 1	8 Devonshire Road, Greenfield Park, Que.
Howe, Randolph Walter	Ap. Sci. 2	4525 St. Catherine St. W., Westmount, Que.
Howell, George Rennie	Arts 2	572 Victoria Ave., Westmount, Que.
Howes, Frederick Stanley	Ap. Sci. 3 (El.)	157 Elm Ave., Windsor, Ont.
Howie, John	Med. 2	170 Laporte Ave., Montreal, Que.
Huckell, Robert Graham	Med. 4 (5 Yr. Course)	10524-125th St., Edmonton, Alta.
Hudon, Frédéric-Valmore	Law 2	Richmond, Que.
Hudon, Valmore-J.	Dent. 2	Richmond, Que.
Hughes, Philip Bernard	Ap. Sci. 1	29 Cote des Neiges Road, Montreal, Que.
Hughston, James Franklin	Ap. Sci. 1	614 Gilmour St., Ottawa, Ont.
Hume, William Edward	Med. 4 (5 Yr. Course)	24 Montreal St., Sherbrooke, Que.
Humphrey, Helen Ruth	Arts P	c/o J. M. Humphrey Co. Ltd., St. John, New Brunswick.
Humphrey, John Thomas P.	Com. 1	12 King St., St. John, N.B.
Hunten, Kenneth William	Arts 4 (B.Sc. Hon.)	Johnville, Que.
Hunter, Piercy Starkey	Arch. 3	Apt. 9. 842 St. Catherine St., W. Montreal, Que.
Hurd, Frederick Warren	Arts 1	9 Weredale Park, Westmount, Que.
Hurdman, Winnifred Mary	Arts 2	Breckenridge, Que.
Hutcheson, Dorothy Blanche	Arts 2 (Hon.)	127 Upper Prince St., Charlottetown, P.E.I.
Hutcheson, John Holden	Arts 4 (Hon.)	457 Clarke Ave., Westmount, Que.
Hutchins, Forbes Meredith	Ap. Sci. 1	381 Olivier Ave., Westmount, Que.
Hutchison, Eileen Brenda	Arts 2	328 Kensington Ave., Westmount, Que.
Hutchison, Margaret Elza	Arts 1	379 Grosvenor Ave., Westmount, Que.
Hutton, Thomas Gregory	Arts 3 (Hon.)	43 Clarendon Ave., Ottawa, Ont.
Hyde, George Miller	Arts 1	346 Mountain St., Montreal, Que.
Hyman, Howard Davison	Ap. Sci. 2	249 Marcil Ave., Montreal, Que.
Hyndman, Alex. William	Dent. 4	64 Montreal, St., Sherbrooke, Que.
Ikovich, James	Ap. Sci. 1	170 Bubbling Well Road, Shanghai, China.
Ingersoll, Hugh Karl	Com. 1	113 Gilmour St., Ottawa, Ont.
Innes, John Floyd	Arts 2	R.R. No. 1, Greenville, Que.
Irwin, Chloris Constance	Arts P	631 Victoria Ave., Westmount, Que.
Irwin, Prescott St. Clair	Med. 4 (5 Yr. Course)	Shelburne, N.S.
Israelovitch, Hyman	Dent. 2	2268 Notre Dame St. W., Montreal.
Jackman, Leo Joseph	Med. 5	45 Springdale St., St. John's, Nfld.
Jackson, Lawrence Wright	Ap. Sci. 4 (El.)	447 Daly Ave., Ottawa, Ont.

Name	Faculty and Year	Home Address
Jacobs, Leah	Arts 4 (Hon.)	Box 567, Cornwall, Ont.
Jacobs, Reginald Arthur	Com. 2	1014 Dorchester St. W., Montreal, Que.
James, Arthur Gregory B.	Med. 2	Trinidad, B.W.I.
James, Arthur Lorne	Ap. Sci. 3 (Ci.)	1620 De La Roche St., Montreal, Que.
James, Harold Thomas	Ap. Sci. 2	130 Flora St., Ottawa, Ont.
James, Kathleen	Arts 2 (Hon.)	10 Brooke Ave., Westmount, Que.
James, William Albert	Ap. Sci. 2	1620 De La Roche St., Montreal, Que.
Jamieson, Brock Fred	Com. 1	Thornton, Ont.
Janes, A Norman	Arts 2 (Hon.)	153 Gower St., St. John's, Nfld.
Jardine, Ingham W	Med. 5	Kensington, P.E.I.
Jardine, Jack Whiteley (Double Course, B.A., M.D.)	Arts 1	Box 451, Nanaimo, B.C.
Jassby, David Gordon	Pharmacy 2	89 Esplanade Ave., Montreal, Que.
Jekill, Victor Henry T	Dent. 2	428 Pius IX Blvd., Montreal, Que.
Jenkins, Kathleen Ruby	Arts 1	361 Grosvenor Ave., Westmount, Que.
Jenks, William Stuart	Ap. Sci. 4 (Me.)	42 Edward St., Halifax, N.S.
Jerrom, Cyril Lewis	Ap. Sci. 4 (Mi.)	Box 454, Cornwall, Ont.
Jessup, Horace Sihler	Med. 5	Ladysmith, B.C.
Johnson, Charles Henry	Arts 1	463 Strathcona Ave., Westmount, Que.
Johnson, David Moffatt	Arts 4 (Hon.)	100-44th Ave., Lachine, Que.
Johnson, Hobart Whitney	Med. 4 (5 Yr. Course)	Soperton, Ont.
Johnson, Samuel John	Med. 1	Thetford Mines W., Que.
Johnson, Violet Florence	Arts 1	751 Hartland Ave., Outremont, Que.
Johnson, Willard Edgar	Med. 3	Almonte, Ont.
Johnson, William James	Ap. Sci. 4 (Ci.)	100-44th Ave., Lachine, Que.
Johnston, Burnett Samuel	Med. 2, 3	Brockville, Ont.
Johnston, Douglas Butterworth	Med. 4 (5 Yr. Course)	Athens, Ont.
Johnston, Erskine Bronson	Arts 1 (B.Sc.)	197 Bronson Ave., Ottawa, Ont.
Johnston, Florence (Double Course, B.A., D.D.S.)	Dent. 1 Arts 3	221 Mance St., Montreal, Que.
Johnston, James Eber	Com. 1	523 Bay St., Ottawa, Ont.
Johnston, Jean Laidlaw	Arts 4	62 High St., Barrie, Ont.
Johnston, John Lyle	Med. 4 (5 Yr. Course)	Box 43, Inwood, Ont.
Johnston, Ralph Ernest	Med. 4 (5 Yr. Course)	Perivale, Manitoulin Isle, Ont.
Johnston, Walter Locke	Com. 1	217 Harvard Ave., Montreal, Que.
Johnston, William John	Arts P	71 Wolseley Ave., Montreal West, Que.
Jones, Frank Meredith	Med. 2	2616 Blackwood Ave., Victoria, B.C.
Jones, Frederic Howden	Ap. Sci. 4 (Mi.)	1630 Rockland Ave., Victoria, B.C.
Jones, Frederick Walter	Med. 5	13067-115th St., Edmonton, Alta.
Jones, Randolph Ketchum	Arts 4 (Hon.)	Woodstock, N.B.
Jones, Thomas Meredith	Med. 4 (5 Yr. Course)	Metchosin P.O., Victoria, B.C.
Jones, Walter	Ap. Sci. 1	167 Selby St., Westmount, Que.
Jones, William M	Dent. 1	Weymouth, Digby Co., N.S.
Jordan, John Nealon	Ap. Sci. 4 (Me.)	5 Paradise Row, St. John, N.B.
Joseph, Philip	Law 2 (LL.B.)	1128 Laurier Ave. W., Montreal, Que.
Joslin, Ettric A (Left Oct. 14th, 1922.)	Ap. Sci. 1	2038 Park Ave., Montreal, Que.
Judelsohn, Louis (Double Course, B.Sc., M.D.)	Arts 2 (B.Sc.)	1446 Clarke St., Montreal, Que.
Jue, Peter Bay	Ap. Sci. 4 (Mi.)	Canton, China.
Kachegensky, Leo H	Arts P	1071a St. Urbain St., Montreal, Que.
Kahanski, Alexander Sissel (Left Nov. 22nd, 1922.)	Ap. Sci. 1	2405 Esplanade Ave., Montreal, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Kalnit, George Theodore	Med. 3	356 Springfield Ave., Newark, N.J.
Kanigsberg, Jacob Clarence	Med. 3, 4	
(Double Course, B.Sc., M.D.)	Arts 4	430 Strathcona Ave., Westmount, Que.
Kaplansky, David Solomon	Dent. 3	Apt. 5, 207 Decarie Blvd., Montreal.
Kathron, David Wolf	Med. 1	9 Benoit St., Montreal, Que.
Katz, J. Leon	Law 1	1057 Cadieux St., Montreal, Que.
Katz, Moses	Med. 1	25 Drolet St., Montreal, Que.
Katz, William	Med. 1	2307a Esplanade Ave., Montreal, Que.
Kaufman, Moses Ralph	Med. 4	
	(6 Yr. Course)	1843 Clarke St., Montreal, Que.
Kay, Edwin	Med. 4	
	(5 Yr. Course)	637 St. André St., Montreal, Que.
Kaye, John Robert	Ap. Sci. 3	
	(Me.)	400 Robie St., Halifax, N.S.
Kearns, Gerald Vincent	Com. 2	74 Somerset St., Ottawa, Ont.
Kearns, Hubert John	Med. 5	Chesterville, Ont.
Keddy, Russell Alfred	Med. 4	
	(5 Yr. Course)	Hemmingford, Que.
Keir, David B	Arts 1	Malpeque, P.E.I.
Kelley, Leonard Randall		
(Left April 14th, 1923.)	Med. 2	134 Brinkerhoff St., Plattsburg, N.Y.
Kellnor, Arthur	Med. 1	458 Elm Ave., Westmount, Que.
Kelloway, Warwick Freeman	Arts 3	
	(Hon.)	57 Penneywell Road, St. John's, Nfld.
Kelly, Edward Patrick	Med. 4	
	(5 Yr. Course)	Buckingham, Que.
Kelly, Helen Elizabeth	Arts 1	
	(B.Sc.)	415 Lafayette St., Ogdensburg, N.Y.
Kelly, James Frederick	Ap. Sci. 4	
	(Ci.)	Stellarton, N.S.
Kelly, Michael Aloysius	Med. 2	102 Osgoode St., Ottawa, Ont.
Kelly, William Moore	Med. 4	
	(5 Yr. Course)	Huntingdon, Que.
Kennedy, John William	Ap. Sci. 1	181 Frank St., Ottawa, Ont.
Kennedy, Neil	Ap. Sci. 4	
	(Met. Eng.)	930 First Ave. W., Owen Sound, Ont.
Kennedy, Roy	Med. 3	Kensington, P.E.I.
Kennedy, William Roland	Med. 4	
(Double Course, B.Sc., M.D.)	(6 Yr. Course)	439 Mance St., Montreal, Que.
Kenrick, Norman Edward	Com. 1	401 Mance St., Montreal, Que.
Kent, Archibald David	Ap. Sci. 3	
	(Met. Eng.)	Tatamagouche, N.S.
Kent, Leonard Ernest	Dent. 4	Ste. Anne de Bellevue, Que.
Kent, Kenneth MacIver	Ap. Sci. 3	
	(Me.)	4024 Dorchester St., Westmount, Que.
Kerr, John Alexander	Dent. 1	1194 Des Erables St., Montreal, Que.
Kerr, Lorna Watson K	Arts 4	
	(Hon.)	14 Amesbury Ave., Montreal, Que.
Kerr, Mildred	Arts P	Georgetown, Demarara, B.G.
Kerr, Trevor Wylie	Ap. Sci. 1	30 Bellevue Ave., Montreal, Que.
Kert, Rebecca	Arts 4	1351 St. Urbain St., Montreal, Que.
Ketchen, William Arthur	Arts 1	
	(B.Sc.)	Temiskaming, Que.
Kezar, George Lennox	Ap. Sci. 4	
	(El.)	Brittannia Heights, Ottawa, Ont.
Kidd, Melbey Richard		
(Left October, 1922.)	Ap. Sci. 1	180 Waverley St., Ottawa, Ont.
Kindestin, William	Dent 3	2111 Park Ave., Montreal, Que.
King, Ralph Hallam	Ap. Sci. 1	Barbarees House, Barbados, B.W.I.
Kingsmill, Walter Juchereau	Ap. Sci. 4	
	(Mi.)	Ballybeg, Rockcliffe, Ottawa, Ont.
Kingston, George Harold	Ap. Sci. 1	Box 149, Prescott, Ont.
Kirby, Halder Smith	Ap. Sci. 3	
	(Chem. Eng.)	Wakefield, Que.
Kirk, Thomas Edwin	Dent. 2	Antigonish, N.S.
Kirschberg, Arthur Abram	Ap. Sci. 3	
	(El.)	1025 Tupper St., Montreal, Que.
Kirsh, Harry	Ap. Sci. 4	
	(Me.)	400 West Hill Ave., Montreal, Que.
Klein, Henry	Dent. 2	180 St. Joseph Blvd. W., Montreal.
Kleker, Bernard	Med. 1	2203 Papineau Ave., Montreal, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Klineberg, Jack	Arts 2	4059 Dorchester St., Westmount, Que.
Klineberg, Otto	Med. 4 (6 Yr. Course)	4059 Dorchester St., Westmount, Que.
Klineberg, Queenie	Arts 3	4059 Dorchester St., Westmount, Que.
Knapp, Edward Winslow	Ap. Sci. 4 (El.)	Sackville, N.B.
Knee, Cecil Howard	Com. P	110 Westminster Ave., Montreal West.
Knowlton, Henry Corey	Med. 5	Guilford, Me.
Knowlton, Paul Hamilton	Ap. Sci. 1	600 Lansdowne Ave., Westmount, Que.
Knowlton, Virginia Wallace	Arts 3	600 Lansdowne Ave., Westmount, Que.
Koff, Arthur Katzman	Med. 1	76 Academy St., Malone, N.Y.
Kolber, Ben	Med. 3	1089 St. Lawrence Blvd., Montreal.
Korenberg, Samuel	Med. 4 (5 Yr. Course)	85 Suzanne St., Montreal, Que.
Krakower, Abram	Med. 1	264 Duluth Ave. E., Montreal, Que.
Kreiner, John Harold	Med. 5	Kitchener, Ont.
Kuntz, Alfred Edward	Med. 4 (6 Yr. Course)	424 Queen St., Ottawa, Ont.
Kursner, Louis	Arts 1	45 Maguire St., Montreal, Que.
Kutzman, Nathaniel	Med. 5	1557 St. Lawrence Blvd., Montreal.
Kydd, Mary Winnifred	Arts 4 (Hon.)	4277 Dorchester St., Westmount, Que.
Kyle, Willard Hugh	Ap. Sci. 2	620 University St., Montreal, Que.
Labkov, Samuel (Left Oct. 17th, 1922.)	Com. 1	1115a City Hall Ave., Montreal, Que.
Lacoe, Jeremiah (Double Course, B.Sc., M.D.)	Med. 2 Arts 4	60 Grubert St., Montreal, Que.
Lafleur, Gilbert-Thomas	Arts 3 (Hon.)	314 Peel St., Montreal, Que.
Laidlaw, Gordon Leslie	Com. 3	1775-11th Ave. W., Vancouver, B.C.
Laidley, Wendell Howard	Ap. Sci. 4 (Ci.)	1850 Park Ave., Montreal, Que.
Laishley, James Harry	Dent. 4	228 Waverley St., Ottawa, Ont.
Laite, Uriah	Arts P	Britannia, Newfoundland.
Lajoie, Romeo James	Med. 2	Edmundston, N.B.
Lalonde, Edith-Ruth	Pharmacy 3	73 Seventh Ave., Ville St. Pierre, Que.
Lamontagne, Yves (Left October 1922.)	Com. P	91a Mance St. Montreal, Que.
Lamothe, Bernard-D	Dent. 2	1042a Rachel St., Montreal, Que.
Lamoy, Lester T	Med. 5	Ausable Forks, N.Y.
Lanctôt, Raymond	Ap. Sci. 3 (Me.)	1908 Van Horne Ave., Montreal, Que.
Land, Harry David	Med. 3	11 Lingan Road, Sydney, N.S.
Lande, Nathan (Left Oct. 30th, 1922.)	Arts P	134 Park Ave., Montreal, Que.
Landry, Leo Medda	Med. 1	701 Rensselaer Ave., Ogdensburg, N.Y.
Lane, Cecil Taverner	Ap. Sci. 2	905 St. Urbain St., Montreal, Que.
Lane, John Bernard	Com. 3	166 Osgoode St., Ottawa, Ont.
Lane, Wilfred LeMesurier	Ap. Sci. 3 (Mi.)	438-11th St. N.W., Calgary, Alta.
Lane, Verne	Dent. 4	2127 Retallack St., Regina, Sask.
Lang, James Williamson	Med. 5	Vegreville, Alberta.
Lanthier, John Cecil	Med. 4 (6 Yr. Course)	1179 Cote St. Antoine Road, Montreal.
Lantz, Joseph Pulsifer	Med. 4 (6 Yr. Course)	Charlottetown, P.E.I.
Larivière, Arthur Emile (Double Course, B.Sc., M.D.)	Arts 1	Box 285, Iberville, Que.
Larose, Paul	Arts P	212 Prud'homme Ave., Montreal, Que.
Latham, Allan Brockway	Arts 1	267 Regent Ave., Montreal, Que.
Lattoni, Mario Emile	Law 2	Florence, Italy.
Laurin, Alice Evelyn	Arts 4 (Hon.)	Lachute, Que.
Lawrence, Frederick S	Ap. Sci. 4 (Ci.)	970 Tupper St., Montreal, Que.
Lawrence, Herbert Seamann	Med. 2	Claremont, Jamaica, B.W.I.
Lawson, John Walter	Med. 4 (5 Yr. Course)	Eganville, Ont.
Lax, Abel	Med. 4 (5 Yr. Course)	Hawkesbury, Ont.
Layhew, John Howard	Arts 3	Stanstead, Que.

Name	Faculty and Year	Home Address
Layne, John Graham	Ap. Sci. 4 (Met. Eng.)	194 Villeneuve St. W., Montreal, Que.
La Zerte, Leonard Clarence	Med. 4 (6 Yr. Course)	Iroquois, Ont., R.R. No. 2.
Le Baron, Karl Shurtleff	Ap. Sci. 4 (Me.)	275 Mance St., Montreal, Que.
Leckie, George Duncan	Com. 3	1176 Burnaby St., Vancouver, B.C.
Leech, Beverley Charles	Med. 4 (6 Yr. Course)	2330 Victoria Ave., Regina, Sask.
Lefsrud, Sigurd	Law 1 (LL.B.)	Viking, Alberta.
Legg, Roland Edward	Ap. Sci. 4 (Mi.)	1653-Sixth Ave., New Westminster, B.C
Leggatt, Marjorie Mary	Arts 4 (B.Sc.)	181 Augusta St., Ottawa, Ont.
Legge, O'Driscoll	Dent 3	268 Isabella St., Pembroke, Ont.
Leitch, Hugh James	Ap. Sci. 3 (Ci.)	476 Strathcona Ave., Westmount, Que.
Lejour, Henry Joseph	Pharmacy 3	145 Stanley St., Montreal, Que.
Lenan, S. Maurice Aug.	Arts P	Diocesan College, Montreal, Que.
Lenoblet du Plessis, Edgar	Law 2	Apt. 19, 297a St. Antoine St., Montreal
Leslie, A. Ogilvy	Ap. Sci. 3 (El.)	824 Dorchester St. W., Montreal, Que.
Lévêque, André-Jean	Ap. Sci. 2	3311 Drolet St., Montreal, Que.
Leveque, Cedric Philip	Med. 1	454 Grosvenor Ave., Westmount, Que.
Levikoff, Fanny	Arts 1	553 Durocher Ave., Outremont, Que.
Levin, Simon	Med. 1	749 Notre Dame St. W., Montreal, Que.
Levine, Benjamin	Med. 2	101 Sanguinet St., Montreal, Que.
Levinson, Leon de Hirsch	Arts 4 (Hon.)	4181 Sherbrooke St. W., Montreal, Que.
Levitt, Harry	Med. 2	1220 St. Urbain St., Montreal, Que.
Levitt, Max	Dent. 1, 2	1218 St. Urbain St., Montreal, Que.
Levy, Albert	Dent. 3	1745 Hutchison St., Montreal, Que.
Levy, Gordon Westrich	Arts 2 (Hon.)	Apt. 6, 1745 Hutchison St., Montreal.
Levy, John	Med. 4 (6 Yr. Course)	204 Park Ave., Montreal, Que.
Levy, Oscar	Arts P	Apt. 1, 75 Mt. Royal Ave. W., Montreal
Lewis, Mortimer Harvey	Med. 5	520 Plant St., Utica, N.Y.
Lidstone, Malcolm	Arts 1	Clarke's Beach, Newfoundland.
Lidstone, Victor John	Law 2	66 Bruce Ave., Westmount, Que.
Lightstone, Louis	Dent. 2	54 Colonial Ave., Montreal, Que.
Lilien, Milton Morton	Med. 2	37 Hillside Ave., Newark, N.J.
Lindsay, Edythe	Arts P	433 Mt. Pleasant Ave., Westmount.
Lindsay, John Ralston	Med. 4	Glasgow, Ont.
Lindsay, William	Arts P	719 University St., Montreal, Que.
Lister, Arthur	Ap. Sci. 1	75 Ninth Ave., Ville St. Pierre, Que.
Litovsky, Abraham	Arts 1	14 Bronsdon Lane, Montreal, Que.
Little, Lawrence P.	Med. 4 (6 Yr. Course)	201 McLeod St., Ottawa, Ont.
Little, William Stephen	Med. 1	R.R. No. 2, Richmond, Ont.
Littner, Max	Med. 3	694b City Hall Ave., Montreal, Que.
Livingstone, D.	Arts P	Summerside, P.E.I.
Lloyd, Milton Sills	Med. 4 (5 Yr. Course)	Rocanville, Sask.
Lochead, John Richard (Double Course, B.A., M.D.)	Med. 2 Arts 4	3136 Second Ave. W., Vancouver, B.C.
Logan, David Ranken (Double Course, B.A., M.D.)	Arts 1	45 Aberdeen Ave., Westmount, Que.
Logan, Herbert Lemuel	Med. 5	120 Chesley St., St. John, N.B.
Logan, Robert Samuel	Ap. Sci. 2	45 Aberdeen Ave., Westmount, Que.
Long, John William	Law P (LL.B.)	175 Villeneuve St. W., Montreal, Que.
Longley, Joseph Edward	Dent. 3	435 Maple Ave., Hamilton, Ont.
Longworth, Eileen Victoria	Arts 2 (Hon.)	181 Fitzroy St., Charlottetown, P.E.I.
Loomis, Dan McKay	Ap. Sci. 3 (Me.)	34 Lincoln Ave., Montreal, Que.
Lough, Gwendolen Winnifred	Arts 1	Fort Coulonge, Que.
Lough, Hubert Oberlin	Med. 2	373 Marlowe Ave., Montreal, Que.
Lough, Margaret Johnston	Arts 2 (Hon.)	373 Marlowe Ave., Montreal, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Lough, Robert James	Med. 1	Moosomin, Sask.
Lovely, Paul Richard (Left October, 1922.)	Med. 2	370 Hanover St., Manchester, N.H.
Low, S. Ernest	Ap. Sci. 2	18 Pansy Ave., Ottawa, Ont.
Lowry, I. King	Dent. 2	Lennoxville, Que.
Luke, Morley Corbus	Arch. 5	41 Brock Ave. N., Montreal West, Que.
Lummis, Oswald John	Arts 4 (Hon.)	Valcourt, Que.
Lundy, Frederick Wilson	Com. 1	St. Hyacinthe, Que.
Lunan, Douglas Mackenzie	Com. 1	Huntingdon, Que.
Lunny, Patrick Joseph	Arts 1	357 Olivier Ave., Westmount, Que.
Luxton, L.C.	Ap. Sci. 3 (Me.)	118 Salisbury Ave., Sault Ste. Marie, Ont.
Lyman, Theodore Walbridge	Arts 1	513 Clarke St., Montreal, Que.
Lynch, John G.	Dent. 2	525 McLeod St., Ottawa, Ont.
Lynn, Leo Joseph	Med. 4 (5 Yr. Course)	16 Lambert Ave., Chelsea, Mass.
Lyons, Franklin Woods	Ap. Sci. 1	26 Dufferin Ave., Brantford, Ont.
Lyons, Ivan Herbert	Pharmacy 2	271 Sherbrooke St. W., Montreal, Que.
McArthur, Elisabeth	Arts P	801 University St., Montreal, Que.
Macaulay, Malcolm John	Med. 2	802 George St., Sydney, N.S.
McAvity, John Allan	Ap. Sci. 1	196 King St. E., St. John, N.B.
McBride, William Haskitt	Med. 4 (5 Yr. Course)	Carp, Ont.
McCabem, Claude Everett A.	Dent. 1	Valleyfield, Que.
McCall, Alan Drummond	Ap. Sci. 3 (Me.)	41 Lincoln Ave., Montreal, Que.
MacCallum, Russell Martin L.	Arts 1 (B.Sc.)	Buckingham, Que.
McCallum, Thurlow Blackburn	Dent. 2	Poltimore, Que.
McCarthy, Thomas Edgar (Left Oct. 18th, 1922.)	Com. 1	807 Cote St. Antoine Road, Westmount, Quebec.
McCaw, John Blacklock	Ap. Sci. 4 (Me.)	37 High St., Sherbrooke, Que.
McClenaghan, George Herbert	Dent. 4	604-12th St. S., Lethbridge, Alta.
McClintock, Wyman Durbar	Arts P	Sedro-Woolley, Washington, D.C.
McClung, Joseph Eldon	Ap. Sci. 1	Watrous, Sask.
McClure, James Carswell (Left November, 1922.)	Med. 5	Cowansville, Que.
McConnel, Dorothea Amelia	Arts 3 (Hon.)	336 Grosvenor Ave., Westmount, Que.
McConnell, Richard Bradford	Arts P Ap. Sci. P	Edgehill, Rockcliffe, Ottawa, Ont.
McCormack, Colin William	Med. 3	Renfrew, Ont.
McCracken, Elmer Gordon	Ap. Sci. 4 (El.)	Huntingdon, Que.
McCrea, Frank Wakefield	Com. P	85 Melbourne St., Sherbrooke, Que.
McCrea, George Winfield	Arts 1	85 Melbourne St., Sherbrooke, Que.
McCuaig, Duncan Roderick	Med. 3	Bainsville, Ont.
McCuaig, Edmund Barton	Arts 1	Bainsville, Ont.
McCulloch, Frank Dudley	Med. 4 (6 Yr. Course)	76 Hochelaga St. E., Moose Jaw, Sask.
McCullough, Gertrude E.	Arts P	9 Exmouth St., St. John, N.B.
McCullough, O. Luxton	Com. 3	303 John St. S., Hamilton, Ont.
MacDermid, Lynden Elwood	Med. 4 (5 Yr. Course)	Martintown, Ont.
MacDermot, Pembroke Noel	Med. 2	90 St. Matthew St., Montreal, Que.
McDiarmid, Donald Carl	Ap. Sci. 2	Carleton Place, Ont.
Macdiarmid, William James Greig	Arts 2	351 Selby St., Westmount, Que.
McDonagh, William Anthony	Dent. 4	1168 Delorimier Ave., Montreal, Que.
Macdonald, Aeldred	Med. 4 (5 Yr. Course)	Harbor Boucher, N.S.
McDonald, Alexander F	Med. 3	R.R. No. 2, Greenfield, Ont.
Macdonald, Anita Cecelia	Med. 3	201 Agnes St., New Westminster, B.C.
Macdonald, Claude Augustine	Med. 4 (5 Yr. Course)	201 Agnes St., New Westminster, B.C.
Macdonald, Donald A.	Med. 4 (5 Yr. Course)	Fraser's Mills, N.S.
Macdonald, Edward Mortimer	Law 2	Pictou, N.S.
Macdonald, George Whitfield	Arts 2	Campbellton, N.B.
McDonald, Howard Alexander	Med. 1	Alexandria, Ont.

NAME	FACULTY AND YEAR	HOME ADDRESS
Macdonald, Hugh Fraser	Ap. Sci. 3 (Chem. Eng.)	3 Inglewood Drive, Hamilton, Ont.
MacDonald, John	Ap. Sci. 3 (Chem. Eng.)	Oxford Ave., Sydney Mines, N.S.
MacDonald, Nicol Bennet	Arts 1	Lake Megantic, Que.
McDonald, Oswald	Med. 1	216 King St. E., St. John, N.B.
Macdonald, Ronald Joseph R.	Med. 5	201 Agnes St., New Westminster, B.C.
MacDonald, Samuel Arthur	Arts 1	45 Fitzroy St., Charlottetown, P.E.I.
McDonell, Eugene Donald	Med. 3	Box 3, Dalhousie Station, Que.
McDougall, James Malcolm (Left Nov. 13th, 1922.)	Law 1	Aylmer, Que.
McDowall, Bethia Brown	Arts 1	31 Selby Ave., Westmount, Que.
McElligott, Dominic C	Med. 4 (5 Yr. Course)	Eganville, Ont.
McEvoy, John Vincent	Med. 2	Dalhousie, N.B.
McEwen, Gladys Mary E	Arts 4 (Hon.)	Maxville, Ont.
McFarlane, Duncan Herbert	Arts 3	Nokomis, Sask.
McGerrigle, Clarence John	Arts 4	Ormstown, Que.
McGerrigle, Harold William	Arts 1	Ormstown, Que.
McGill, Charles Sherlock	Med. 5	Shelburne, N.S.
MacGillis, Lester	Ap. Sci. 3 (El.)	Lancaster, Ont.
MacGillivray, Donald Joseph	Med. 4 (5 Yr. Course)	Main St., Antigonish, N.S.
McGinn, William John	Med. 4 (5 Yr. Course)	North Wiltshire, P.E.I.
McGoun, David Douglas M	Arts 1	162 Drummond St., Montreal, Que.
McGrand, Frederic Addison	Med. 5	Keswick, N.B.
McGrath, John Francis	Med. 5	57 Luke St., Waterbury, Conn.
McGregor, Douglas Urquhart	Med. 4 (5 Yr. Course)	Waterdown, Ont.
McGuire, John Alfred	Med. 4 (6 Yr. Course)	Cornwall, Ont.
MacInnes, Donald Alexander	Ap. Sci. 4 (Me.)	751 Pine Ave. W., Montreal, Que.
McIntosh, Clarence Alexander	Med. 4 (5 Yr. Course)	331 Metcalfe St., Ottawa, Ont.
McIntosh, Arlie John Austin	Com. 2	Winchester, Ont.
MacIntosh, Donald Smith	Med. 5	West River, Pictou Co., N.S.
McIntosh, Robert Thornton	Com. 1	262 Prince Arthur St., Montreal, Que.
McIntyre, Andrew Thomson	Arts 4 (Hon.)	67 McTavish St., Montreal, Que.
McKay, Douglas Alexander	Com. 1	679 Ouellette Ave., Windsor, Ont.
Mackay, Olive A	Arts P	Upper Melbourne, Que.
MacKay, William Angus	Med. 5	Paynton, Sask.
Mackeen. Robert Arthur H	Med. 4 (5 Yr. Course)	297 Prince Arthur St. W., Montreal, Que.
McKenna, Leo Barnard	Med. 2	179 Dorchester St., Charlottetown, P.E.I.
McKenna, Philip Dennis	Med. 3	Vernon, P.E.I.
MacKenzie, Ian	Med. 2	Campbellton, N.B.
McKenzie, Norman Hector	Ap. Sci. 1	796 Victoria Road, Whitney Pier, Sydney, N.S.
Mackenzie, William Bigelow	Ap. Sci. 4 (Ci.)	611 Frisco Bldg., St. Louis, Mo.
McKeown, Charles John Weylie.. (Left Nov. 7th, 1922.)	Med. 1	Mono Road, Ont.
McKeown, Hilton John	Med. 2	Russell, Ont.
MacKercher, Donald Angus	Med. 2	Maxville, Ont.
McKim, Anson Coutes	Com. 2	648 Roslyn Ave., Westmouut, Que.
McKindsey, Gordon	Ap. Sci. 4 (Ci.)	Lennoxville, Que.
McKinnon, Douglas David	Med. 2	Hollister, California, U.S.A.
MacKinnon, Grace Leonora (Double Course, B.Sc., B.H.S.)	Arts 2	65 Portland Ave., Sherbrooke, Que.
MacKinnon, Hugh Neil	Med. 2	Glace Bay, N.S.
McKinnon, James Donald	Med. 4 (5 Yr. Course)	Blacklick, Penn., U.S.A.
McKinnon, Stuart Duncan	Med. 1	Cupar, Sask.
Macklaier, William Fraser	Law 3	851 Lorne Crescent, Montreal, Que.
McKyes, Shirley Edward	Ap. Sci. 1	71 Milton St., Montreal, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
McLagan, Thomas Rodgie	Ap. Sci. 4 (Me.)	429 Argyle Ave., Westmount, Que.
MacLaren, Alexander Barnet	Ap. Sci. 4 (Me.)	Buckingham, Que.
MacLaren, Albert Roy	Ap. Sci. 4 (Me.)	Buckingham, Que.
McLaren, Leo G	Ap. Sci. 3 (Ci.)	St. Michel des Saints, Berthier Co., Que.
MacLaren, Margaret Jardine L.	Arts 2 (Hon.)	75 Coburg St., St. John, N.B.
McLauchlin, Lucius Gould	Med. 4 (5 Yr. Course)	Truro, N.S.
McLean, A. H.	Arts P	Wesleyan Theological College, Montreal
MacLean, Basil Clarendon	Med. 3	79 Cabot St., Montreal, Que.
MacLean, C. Peter	Med. 5	Cardigan, P.E.I.
McLean, Daniel Irving	Med. 5	259 Sherbrooke St. W., Montreal, Que.
McLean, Duart Vercoe	Arts 4 (B.Sc.)	24-41st Ave., Lachine, Que.
MacLean, Eilleen (Left Oct. 11th, 1922.)	Arts P	233 Old Orchard Ave., Montreal, Que.
McLean, Emma Louise	Arts P	Sherbrooke, N.S.
McLean, Ernest Matthew	Med. 4 (6 Yr. Course).	31 Frederick St., Port of Spain, Trinidad, B.W.I.
MacLean, Hugh Alan	Arts 3	1020 Moss St., Victoria, B.C.
MacLean, John Gordon	Med. 1, 2	North Wiltshire, P.E.I.
MacLean, Kenneth Sheldon	Med. 3	North Wiltshire, P.E.I.
McLean, Lewis Follett	Med. 2	205 Parkdale Ave., Buffalo, N.Y.
MacLeay, Jean Stalker	Arts 2 (Hon.)	5265 Western Ave., Montreal, Que.
McLellan, Allister Matheson	Med. 4 (5 Yr. Course)	Tatamagouche, N.S.
McLellan, Annie Mildred	Arts 3	710 Hartland Ave., Outremont, Que.
McLelland, Edward Russell	Arts P Arch. P	396 Harvard Ave., Montreal, Que.
McLennan, Gordon Roderick	Ap. Sci. 4 (El.)	892,-5th Ave., Ottawa, Ont.
MacLennan, Malcolm	Arts P	Scotstown, Que.
MacLennan, Mary Muriel C.	Med. 2	17 Holton Ave., Westmount, Que.
MacLeod, Alexander Norman	Arch. 4	New Waterford, N.S.
McLeod, Clarke Kenneth	Med. 2	Wolfville, N.S.
MacLeod, Elmer Duncan	Arts 2 (Hon.)	Richmond, Que.
MacLeod, John Peter	Com. 1	Gould Station, Que.
MacLeod, John Wendell (Double Course, B.Sc., M.D.)	Arts 1	3189 St. James St. W., Montreal, Que.
McLeod, Louise	Arts P	Chemainus, B.C.
McLeod, Neil (Double Courese, B.A., M.D.)	Arts 4 Med. 2	Box 133, Summerside, P.E.I.
MacLeod, Robert Brodie	Arts 1	3189 St. James St. W., Montreal, Que.
McLeod, Robert Neil	Ap. Sci. 4 (Me.)	772 Dorchester St. W., Montreal, Que.
McLeod, Scott Hutchison	Med. 5	Islay, Alta.
McLetchie, James Kennedy	Arts 3 (Hon.)	1128 Delorimier Ave., Montreal, Que.
McMaster, Frances Ross	Arts 2	365 Metcalfe Ave., Westmount, Que.
McMaster, Francis White	Ap. Sci. 2	596 Lansdowne Ave., Westmount, Que.
Macmillan, Allan John	Dent. 4	100 Bronson Ave., Ottawa, Ont.
MacMillan, Hugh D	Arts 2	R.R. No. 2, Dalkeith, Ont.
McMillan, Helen Janet	Arts P	Jacquet River, N.B.
Macmillan, Marianne Verity	Arts 3 (Hon.)	447 Mt. Pleasant Ave., Westmount. Que.
McMillan, Ralph Edwin	Ap. Sci. 2	169 Villeneuve St. W., Montreal, Que.
McNab, Archibald Hubert	Ap. Sci. 2	Waldo, B.C.
McNabb, Harvey Clifford	Dent. 1	Renfrew, Ont.
McNally, William James S.	Dent. 4	Barachois, Gaspe Co., Que.
McNamara, Wesley Camp	Med. 2	Young's Cove Road, N.B.
McNamee, James Owen	Arts 1	959 Balmoral Road, Victoria, B.C.
Macnaughton, Alan Aylesworth	Arts 1	251 Hingston Ave., Montreal, Que.
McNaughton, Cornelius Harold	Ap. Sci. 2	Thetford Mines, Que.
MacNaughton, Eric Alexander	Med. 3	Martintown, Ont.
McNaughton, Muriel Carr	Arts 2	4565 Sherbrooke St., Westmount, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
MacNeill, Ralph Donald		
(Left Oct. 28th, 1922.)	Med. 1	Marysville, N.B.
McNaughton, Malcolm Edward	Arts 1	4565 Sherbrooke St., Westmount, Que.
McNaughton, Ronald Russel	Ap. Sci. 4	
	(Met. Eng.)	R.M.D. No. 4, Victoria, B.C.
Macnutt, Erskine Keir	Ap. Sci. 4	
	(Ci.)	Malpeque, P.E.I.
McOuat, Margaret Mabel	Arts 2	
	(Hon.)	Lachute, Que.
McPhail, Hugh	Arts 2	Renfrew, Ont.
McPhail, Mary Archibald	Arts 4	1023 Dorchester St. W., Montreal, Que
McPhail, W. Neil	Med. 5	Drummond, Montana.
Macpherson, Frank Randolph	Arts 4	12 Arnold Road, Kingston, Jamaica, B.W.I.
McRae, Arthur Lyell	Med. 4	
	(5 Yr. Course)	9842-87th Ave., Edmonton, Alta.
Macrae, Donald	Ap. Sci. 4	
	(Me.)	29 Prospect St., Westmount, Que.
MacRae, Donald	Dent. 3	R.R. 1, Maxville, Ont.
Macrae, Ruth	Arts 3	
	(Hon.)	29 Prospect St., Westmount, Que.
McRae, Shirley De Bruce	Com. 1	2 Oakland Road, Halifax, N.S.
McRitchie, Maude Harriet	Arts 1	Gould, Que.
McVey, John Aloysius	Med. 3	43 St. Mark St., Montreal, Que.
McVicar, Donald H	Arts 2	
	(Hon.)	Inwood, Ont.
McWatters, Marjorie	Arts 2	3593 Verville St., Montreal, Que.
Mace, Thomas Willard	Ap. Sci. 2	St. Johns, Que.
Mace, William Alfred	Ap. Sci. 1	306 Beaconsfield Ave., Montreal, Que.
Mack, Mary Josephine	Arts 1	22 Sherbrooke St. W., Montreal, Que.
Macklin, Rubin Peter	Ap. Sci. 1	1717 Park Ave., Montreal, Que.
Mader, Victor Owen	Med. 5	69 Morris St., Halifax, N.S.
Magid, Jack Jacob	Com. 3	713 Berri St., Montreal, Que.
Maher, Bernard S	Ap. Sci. 1	Senneville, Que.
Mahoney, Hugh Raymond	Ap. Sci. 1	71a Ste. Famille St., Montreal, Que.
Maillard, Edgar R	Med. 5	Port of Spain, Trinidad, B.W.I.
Mair, Harold Usborne	Med. 5	Chesley, Ont.
Major, Emile Joseph S	Med. 4	
	(5 Yr. Course)	12 Fuel St., Ottawa, Ont.
Malamud, Nathan	Med. 2	1505 Clarke St., Montreal, Que.
Mallett, Marshall	Med. 4	
	(5 Yr. Course)	11219-77th Ave., Edmonton S. Alta.
Mallison, Elizabeth Margaret		
(Left Oct. 25th, 1922.)	Com. P	853 Dorchester St. W., Montreal, Que.
Malone, Michael Patrick	Ap. Sci. 3	
	(El.)	41a Mentana St., Montreal, Que.
Malone, William Harcourt H	Ap. Sci. 4	
	(Me.)	1366 Greene Ave., Westmount, Que.
Malone, Willis Peyton	Ap. Sci. 2	1366 Greene Ave., Westmount, Que
Mancuso, Ferdinando	Med. 3	Carlopoli, Cat., Italy.
Manley, Edward Hugh		
(Left Jan. 24th, 1923.)	Ap. Sci. 1	Thorold, Ont.
Manley, Patrick S	Law 1	
(Left October, 1922.)	(LL.B.)	Thorold, Ont.
Manson, Arthur Bennett	Med. 3	3049 Hemlock St., Vancouver, B.C.
Manson, Francis St. Clair	Ap. Sci. 3	2523 Park Ave., Montreal, Que.
	(Me.)	
Manville, Alfred Ernest	Ap. Sci. 2	204-12th St. E., Prince Albert, Sask.
Maraldi, Carl Francis	Med. 4	
	(5 Yr. Course)	32 Easton St., Roxbury, Boston, Mass.
Marcotte, Edward Gideon	Med. 4	
	(5 Yr. Course)	26 Jackson St., Rochester, N.H.
Marcovitch, Joseph	Med. 5	55 Colonial Ave., Montreal, Que.
Marcus, David	Med. 5	1074 St. Urbain St., Montreal, Que.
Marcus, Simon	Med. 3	1074 St. Urbain St., Montreal, Que.
Markoff, Moses	Pharmacy	1034 St. Urbain St., Montreal, Que.
Markovitz, Max	Med. 5	1916 Mance St., Montreal, Que.
Marks, Moses Isaac	Med. 5	173 Colonial Ave., Montreal, Que.
Marler, George Leonard	Arts 1	15 Redpath Crescent, Montreal, Que.
Marpole, Harry Gifford	Com. 2	1790 King Edward Ave., Vancouver, B.C.
Marsh, Frank Jason		
(Double Course, B.A., M.D.)	Med. 2 Arts 4	Brome, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Marsh, John Arthur	Com. 2	Amherstburg, Ont.
Marsh, John Paul	Med. 4 (5 Yr. Course)	326 Grande Allée, Quebec, Que.
Marshall, Donald Murray	Ap. Sci. 1	531-11th St., South Lethbridge, Alta.
Marshall, Helen Warren	Arts 4	692 Victoria Ave., Westmount. Que.
Marshall, Jean Ethelwynne	Arts P	466 Mt. Stephen Ave., Westmount, Que.
Martin, Blanche Helena	Med. 2	521 Fourth St. S.E., Minneapolis, Minn.
Martin, Earle Crutchfield	Law 3	Dewittville, Que.
Martin, Norman Leslie	Dent. 1	1539 Chabot Ave., Montreal, Que.
Martin, Robert Henry	Com. 2	63 Drummond St., Montreal, Que.
Martin, Ruth Audrey	Arts P	351 Melville Ave., Westmount, Que.
Martin, S. Jameson	Med. 1	306 Wilson Ave., Montreal, Que.
Martin, Walter Herbert	Ap. Sci. 1	323 Mackay St., Montreal, Que.
Martineau,	Arts P	
Martineau, Ed die Adolphe	Arts P	R.R. No 2, Quyon, Que.
Massé, Paul Raymond	Com. 1	548 St. Denis St., Montreal, Que.
Massé, Thomas Norman	Med. 5	548 St. Denis St., Montreal, Que.
Massie, Redvers Albert	Med. 4 (5 Yr. Course)	214 King St. E., St. John, N.B.
Massy-Bayly, Elizabeth	Arts 3 (Hon.)	5035 Western Ave., Montreal, Que.
Matheson, Arthur Marshall	Ap. Sci. 4 (Chem. Eng.)	69 Russell Ave., Ottawa, Ont.
Matheson, George Lawrence	Ap. Sci. 3 (Chem. Eng.)	69 Russell Ave., Ottawa, Ont.
Matheson, Jean Isabel	Arts 3 (Hon.)	69 Russell Ave., Ottawa, Ont.
Matile, Florence	Arts P	693 Mountain St., Montreal, Que.
Matthews, Gordon Oliver	Med. 4 (5 Yr. Course)	372 Arthur St., Port Arthur, Ont.
Matthews, Howard Sands	Com. 3	50 Lorne Crescent, Brantford, Ont.
Maxwell, Edward Gerrard	Ap. Sci. 3 (Ci.)	Strathcona Hall, Montreal, Que.
Maxwell, Marvin Wilbur	Arts P	R.R. No. 2, St. Stephen, N.B.
Mazur, Sydney (Left Oct. 28th, 1922.)	Pharmacy	1881 St. Urbain St., Montreal, Que.
Meahan, Thomas Francis	Med. 3	West Bathurst, N.B.
Medbury, Dorothy Durfee	Arts 4	2 Parkside Place, Montreal, Que.
Meikle, Stuart Fulton (Left Oct. 14th, 1922.)	Ap. Sci. 2	Morrisburg, Ont.
Melanson, Henry Paul (Double Course, B.A., M.D.)	Arts 2	1615 Lajoie Ave., Outremont, Que.
Melanson, Joseph Arthur	Med. 2	Shediac, N.B.
Mellen, Edward Wilson	Arts 1	103 Chomedy St., Montreal, Que.
Mellor, Mary Dorothea	Arts 1	Box 21, Richelieu, Que.
Melville, Kenneth Ivan	Med. 3	73 Hanover St., Kingston, Jamaica.
Melzak, Jacob Wolf	Med. 1	257 Laval Ave., Montreal, Que.
Mencher, Arthur Abraham	Med. 1	152 Laurier Ave. W., Montreal, Que.
Mendel, Esther	Arts P	1105 Bernard St., Montreal, Que.
Mendelovitch, Manuel Arthur	Arts 3	636 St. Lawrence Blvd., Montreal, Que.
Mendelsohn, Samuel Leon	Law 2	157 Rachel St. E., Montreal, Que.
Meneely, Andrew Hugh	Med. 5	R.R. No. 4, Edmonton, Alta.
Menzies, Clifford Gordon	Med. 3	130 Waverly St., Ottawa, Ont.
Menzies, Ernest Cahill	Med. 4 (5 Yr. Course)	Aylesbury, Sask.
Mercier, Alexandre	Ap. Sci. 3 (El.)	373 Laval Ave., Montreal, Que.
Mercier, Maxime-James	Ap. Sci. 1	373 Laval Ave., Montreal, Que.
Merritt, Gerald M	Ap. Sci. 2	74 Chesterfield Ave., Montreal, Que.
Merry, Ralph Vickers	Arts 1	Magog, Que.
Messenger, Israel	Arts 1	1627 St. Dominique St., Montreal, Que.
Metayer, Gurl A	Com. P	2 Souvenir Ave., Montreal, Que.
Mettarlin, Aaron Hyman	Arts 4 (Hon.)	1143 Clarke St., Montreal, Que.
Michaud, Angeline	Arts P	Kingsey Falls, Que.
Michaud, Cameron William (Left Jan. 24th, 1923.)	Ap. Sci. 1	56 Somerville Ave., Westmount, Que.
Michener, Robert Bryan	Med. 2	205 N. Washington St , Wichita, Kan.
Michlin, Jehiel	Arts 3 (Hon.)	715 Cadieux St., Montreal, Que.
Middleton, Lyall Archibald	Med. 4 (6 Yr. Course)	Lachute Mills, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Middleton, William	Med. 4 (5 Yr. Course)	61 Cambridge St., Victoria, B.C.
Midgley, Russell Edward	Ap. Sci. 4 (Chem. Eng.)	113 Northcliffe Ave., Montreal, Que.
Millen, Laura Isobel (Double Course, B.Sc., M.D.)	Arts 4,	418 Wood Ave., Westmount, Que.
Millen, Stephen Boyd	Arts 1	418 Wood Ave., Westmount, Que.
Miller, Arthur Pirie	Ap. Sci. 3 (Me.)	40 Ballantyne Ave., Montreal West.
Miller, Bernard David	Com. 3	P.O.Box 547, St. John's, Nfld.
Miller, Chauncey Alvin	Arts 1 (B.Sc.)	263 Old Orchard Ave., Montreal, Que.
Miller, David	Arts 2 (Hon.)	53 Phillips Sq., Montreal, Que.
Miller, John James Hutchison	Ap. Sci. 2	44 Sunnyside Ave., Montreal, Que.
Miller, Joseph States (Double Course, B.Sc., M.D.)	Arts 3 Med. 1	760 Notre Dame St. W., Montreal, Que.
Miller, Julius Leon	Ap. Sci. 2	136 Vendome Ave., Montreal, Que.
Miller, Louis	Dent. 2	664a Colonial Ave., Montreal, Que.
Miller, Noah	Med. 3	513 Phillips Sq., Montreal, Que.
Milligan, James Alexander	Ap. Sci. 1	108 Edison Ave., St. Lambert, Que.
Milligan, William Andrew	Med. 1	P.O. Box 1026, Cornwall, Ont.
Millington, Frank	Com. 1	89 Ash Ave., Montreal, Que.
Millman, Aaron	Pharmacy	80 Laval Ave., Montreal, Que.
Mills, Andrew Kaye	Arch. 2	67 Fifth Ave., Ottawa, Ont.
Mills, Cecil Gordon	Ap. Sci. 2	867 Durocher Ave., Outremont, Que.
Mills, Charles Perkins	Ap. Sci. 4 (El.)	67 Fifth Ave., Ottawa, Ont.
Mills, James William	Dent. 4	Ormstown, Que.
Milne, Edwin Manson	Com. 1	47 Wentworth St., Hamilton, Ont.
Mintzberg, Samuel	Arts 1	3050 Clarke St., Montreal, Que.
Mirsky, Samuel	Med. 4 (5 Yr. Course)	359 Cumberland St., Ottawa, Ont.
Mitchell, George MacGregor	Ap. Sci. 4 (Me.)	85 Victoria Road, Halifax, N.S.
Mitchell, George A. Wellington	Com. 3	143 Flora St., Ottawa, Ont.
Mitchell, J. Murray	Ap. Sci. 4 (Chem. Eng.)	4630 St. Catherine St., Westmount.
Mitchell, Samuel Leslie	Med. 5	207 Douglas Ave., St. John, N.B.
Mitchell, Terence Francis	Com. 1	718 Sherbrooke St. W., Montreal, Que
Mitchell, Wallace Murray	Ap. Sci. 3 (Ci.)	4630 St. Catherine St. W., Westmount.
Mizuno, Charles Shirokichi	Dent. 1	P.O. Box 253, Victoria, B.C.
Monaker, Jacob (Double Course, B.Sc., M.D.)	Arts 3	27 Esplanade Ave., Montreal, Que.
Mondéhard, René	Ap. Sci. 1	1713 Mance St., Montreal, Que.
Monk, Elizabeth C	Law 3	1050 Tupper St., Montreal, Que.
Montgomery, Walter James	Com. 3	Box 679, Pembroke, Ont.
Moodie, George Earl	Med. 5	Otter Lake, Que.
Mooney, Fraser Dudley	Med. 4 (5 Yr. Course)	Stellarton, N.S.
Moore, Alexander Whiteside	Ap. Sci. 3 (Mi.)	1021 Pemberton Road, Victoria, B.C.
Moore, Allan Frederick	Arts 4 (Hon.)	23 Roslyn Ave., Ottawa, Ont.
Moore, Ernest Nelson (Double Course, B.A., M.D.)	Arts 4 Med. 2	St. Chrysostome, Que.
Moore, James Gordon W	Ap. Sci. 2	St. Johns, Que.
Moore, Melville Johnson	Dent. 3	40 Marsolais Ave., Outremont, Que.
Moore, Meredith Henderson	Ap. Sci. 1	Apt. 22, 271 Prince Arthur St. W., Montreal, Que.
Moore, Reginald Arthur	Ap. Sci. 4 (El.)	2524 Russell Ave., New Westminster, B.C
Moran, Taylor Matthew	Ap. Sci. 4 (Me.)	86 Carruthers Ave., Ottawa, Ont.
Moran, Vera May Thomson	Arts 1 (B.Sc.)	32 St. Cecile St., Montreal, Que.
Morgan, George Senkler	Med. 4 (5 Yr. Course)	4173 Western Ave., Westmount, Que.
Morin, Charles-Auguste	Ap. Sci. 4 (Ci.)	2719 Christophe-Colomb St., Montreal.

NAME	FACULTY AND YEAR	HOME ADDRESS
Morrice, David Rousseaux	Com. 2	291 Russell Hill Road, Toronto, Ont.
Morris, Aylmer Livingstone	Law 1	108 Dufferin Ave., Sherbrooke, Que.
Morris, Campbell	Dent. 3	Ste. Therese, Que.
Morris, Geoffrey Marshall	Med. 3	Guy St., Windsor, N.S.
Morris, George Douglas	Med. 4 (5 Yr. Course)	80 Asken St., London, Ont.
Morris, Robert Schofield	Arch. 5	264 McNab St. S., Hamilton, Ont.
Morris, Royden Macdougall	Com. 3	1100 Ridgeway St., Fort William, Ont.
Morris, William D	Med. 4 (5 Yr. Course)	University of Alberta, Edmonton, Alta.
Morrison, D. R.	Arts P	Wesleyan College, Montreal, Que.
Morrison, Walter James J	Ap. Sci. 1	Chateauguay Basin, Que.
Morrissy, Richard Herbert	Med. 4 (5 Yr. Course)	Newcastle, N.B.
Morrow, Carl Edward Lynn	Med. 2	Metcalfe, Ont.
Morton, Christina Margaret	Arts 3 (Hon.)	1172 Cote St. Antione Road, Montreal.
Moscovich, Jacob	Med. 2	214 Fifth Ave. S., Lethbridge, Alta.
Mosely, Herbert Frederick	Arts 1	209 Argyle Ave., Sydney, N.S.
Moskovitch, Samuel	Arts 2 (Hon.)	15 McNicoll Ave., Montreal, Que.
Mosley, William	Med. 1	102 Dorothy St., Welland, Ont.
Mossman, Donald Davis	Arts 4 (Hon., B.Sc.)	66 Hutchison St., Montreal, Que.
Mott, John Alwin	Com. 2	583 McLaren St., Ottawa, Ont.
Mount, Alethea Maud	Arts 1	134 St. Charles St., Longueuil, Que.
Mowat, John Kennedy	Ap. Sci. 1	Williamstown, Ont.
Mueller, Walter Charles	Com. 1	43 Young St., Waterloo, Ont.
Muhlstock, David Harry	Dent. 2	458 St. Dominique St., Montreal, Que.
Muir, Allan Kenneth	Ap. Sci. 3 (Mi.)	Bank of Toronto, Burford, Ont.
Mules, Nathan Ernest	Ap. Sci. 1	670 Bloomfield Ave., Outremont, Que.
Mulligan, Claude Aylmer	Ap. Sci. 3 (Ci.)	Maniwaki, Que.
Mulligan, Henry Iveson	Ap. Sci. 1	Fort Coulonge, Que.
Munn, W. H. Blanchard	Med. 2	Summerland, B.C.
Munn, Wilfrid Lockerby	Com. 2	4273 Dorchester St., Westmount, Que.
Munro, David Climie	Arts 1	214 Logan St., St. Lambert, Que.
Munro, David John	Ap. Sci. 4 (El.)	2299a Hutchison St., Montreal, Que.
Munro, Donald Scott	Ap. Sci. 1	356 St. Catherine Road, Outremont,
Munro, Gordon Hugh	Ap. Sci. 4 (Me.)	520 Dickson St., Peterboro, Ont.
Munro, William Caldwell	Ap. Sci. 4 (Chem. Eng.)	327 Melrose Ave., Montreal, Que.
Munro, William David	Ap. Sci. 2	Pictou, N.S.
Munroe, Herbert James	Dent. 2	131 Henderson Ave., Ottawa, Ont.
Murphy, Arthur Payne	Ap. Sci. 1	504 Dufferin Ave., London, Ont.
Murphy, Brendan William	Med. 5	419 Brunswick St., Halifax, N.S.
Murphy, Edward Justin	Ap. Sci. 4 (Met. Eng.)	Apt. 1, 2 Oldfield Ave., Montreal, Que.
Murphy, Frank Cyril	Com. 1	433 Selkirk Ave., Fort William, Ont.
Murphy, Francis Joseph	Med. 2	10½ Patterson St., Belleville, Ont.
Murphy, John Herbert	Arts 1 (B.Sc. Course)	620 Victoria Ave., Westmount, Que.
Murray, Annie Mary	Arts 3	The Manse, Milan P.O., Hampden,Que.
Murray, Bertram Spence	Arts 1	743 University St., Montreal, Que.
Murray, David Fraser	Med. 4 (5 Yr. Course)	927 Collinson St., Victoria, B.C.
Murray, John William	Ap. Sci. 2	670 Sherbrooke St. W., Montreal, Que.
Murray, Parvin Lamont	Dent. 4	Deer Island, N.B.
Murray, Phyllis Margorie	Arts 3 (Hon.)	4 Moncton Ave., Quebec, Que.
Murray, William Alexander	Med. 5	Brownsburg, Que.
Murray, William Reginald	Dent. 2	Shediac, N.B.
Myers, Jacob	Arts 1	1931 Esplanade Ave., Montreal, Que.
Nadler, Samuel Bernard (Double Course, B.A., M.D.)	Arts 1	1535 Park Ave., Montreal, Que.
Nairn, Alexander Gordon	Arts 2 (Hon.)	805 Shuter St., Montreal, Que.
Nandlal, Ramkissoon	Med. 2	348 Sherbrooke St. W., Montreal, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Napier, Charles Edward	Ap. Sci. 2	248 Prince Arthur St. W., Montreal.
Nash, Arthur Beynon	Med. 3	1005 Pemberton Road, Victoria, B.C.
Nathanson, Louis	Med. 3	760 Victoria Road, Sydney, N.S.
Nathanson, Max	Ap. Sci. 1	1803 St. Urbain St., Montreal, Que.
Neamtan, Jessie	Pharmacy	1940 Mance St., Montreal, Que.
Neel, Walter Stanton	Com. 3	Glen Ave., Millburn, N.J.
Negru, Myer	Com. 3	1211 Clarke St., Montreal, Que.
Neiderhoffer, Sydney Louis (Double Course, B.A., M.D.)	Arts 2	128 Drolet St., Montreal, Que.
Nelligan, John Bartholomew	Ap. Sci. 2	367 de L'Epée Ave., Outremont, Que.
Nelligan, Lawrence Patrick	Med. 3	St. Louis, P.E.I.
Nelson, Julius (6 Yr. Course)	Med. 4	1941 Esplanade Ave., Montreal, Que.
Neroutsos, Cyril Holton	Ap. Sci. 1	46 Dallas Ave., Victoria, B.C.
Newball, Leopold Octavio	Arts P	San Andres, Republic of Colombia.
Newman, Archibald Hamilton (Double Course, B.Sc., M.D.)	Arts 1	10 Gladstone Ave., Westmount, Que.
Newton, Theodore Francis M (Hon.)	Arts 2	188 Brock St. S., Sarnia, Ont.
Nichols, Iris (Double Course, B.A., B.H.S.)	Arts 1	81 Chesterfield Ave., Westmount, Que.
Nieghorn, Marjorie	Arts P	4878 Westmount Ave., Westmount.
Nixon, Isobel	Arts 1	647 Belmont Ave., Westmount, Que.
Noonan, Wilfred James V (5 Yr. Course)	Med. 4	1082 Newport Ave., Detroit, Mich.
Norris, Jane Isabel	Arts P	144 St. Thomas St., Longueuil, Que.
Northrup, Irwin	Med. 2	715 Morris St., Odgensburg, N.Y.
Norton, Irwin Gilbert	Ap. Sci. 2	1445 Van Horne Ave., Montreal, Que.
Novella, Estnardo Alfredo	Arts P	10th St., No. 3, Guatemala, Cen. Am.
Novick, Heine Ezra	Arts 1	25 Demontigny St. E., Montreal, Que.
Noyes, John Whiting	Ap. Sci. 1	11 Buckingham Ave., Montreal, Que.
Nutting, Bruce Powell	Ap. Sci. 2	318 Cooper St., Ottawa, Ont.
Oberfeld, Harry	Med. 1	1438 Fabre St., Montreal, Que.
O'Brien, Edson Minto (Ci.)	Ap. Sci. 3	Noel, Hants Co., N.S.
O'Brien, John Lewis	Law 3	4130 Dorchester St., Westmount, Que.
O'Connor, Maurice Joseph (5 Yr. Course)	Med. 4	Beauharnois, Que.
Ogilvie, Leslie Grant	Com. 3	23 Grey Ave., Montreal, Que.
Ogilvy, John Angus	Arts 4	53 Ballantyne Ave., Montreal West.
Ogilvy, Robert Forrest (Ci.)	Ap. Sci. 3	165 Maple Ave., Hamilton, Ont.
O'Hagan, Howard (LL.B.)	Law 1	Lucerne, B.C.
O'Heir, Arthur Selden	Arst 1	92 Wellington St. S., Hamilton, Ont.
O'Heir, Hugh Bingham (Mi.)	Ap. Sci. 4	92 Wellington St. S., Hamilton, Ont.
Oliver, Albert Stephen	Ap. Sci. 1	37 Monkland Ave., Ottawa, Ont.
Oliver, Cuthbert Jack (El.)	Ap. Sci. 4	204 Franklin St., New York, N.Y.
Oliver, James Harold (El.)	Ap. Sci. 4	Rockburn, Que.
Olmsted, Alexander Ingersoll	Med. 1	215 James St. S., Hamilton, Ont.
Olmsted, John Gerald M (6 Yr. Course)	Med. 4	413 Guy St., Montreal, Que.
O'Mara, Michael J	Dent. 1	641 Brainard Ave., Detroit, Mich.
O'Regan, Charles Herbert	Med. 2	73 Elliott Row, St. John, N.B.
Orr, James McMaster	Dent. 1	230 Hibernia Road, Montreal, Que.
Osgood, Elizabeth Lee	Arts 1	286 Durocher Ave., Outremont, Que.
O'Shaughnessy, Patrick Leo (Ci.)	Ap. Sci. 4	Newcastle, N.B.
Osler, Philip Featherstone (Mi.)	Ap. Sci. 3	147 Metcalfe St., Montreal, Que.
Ostro, Harry	Pharmacy	219 Querbes Ave., Outremont, Que.
Ostroff, Louis Joseph	Med. 1	876 City Hall Ave., Montreal, Que.
Owen, Lois Adele (Hon.)	Arts 2	148 Pownal St., Charlottetown, P.E.I.
Owens, Keith Beaumont	Com. 1	Lachute, Que.
Packham, James McLeod	Com. 2	Brampton, Ont.
Palmer, Edna May	Arts 4	76 Moore St., Sherbrooke, Que.
Palmer, Charles Neville	Arts 1	Charlottetown, P.E.I.

NAME	FACULTY AND YEAR	HOME ADDRESS
Pangman, John Burnett	Ap. Sci. 4 (Chem. Eng.)	670 Sherbrooke St. W., Montreal, Que.
Parker, Helen Margaret (Double Course, B.A., B.H.S.)	Arts 1	124 Northcliffe Ave., Montreal, Que.
Parker, Olive Agnes	Arts 1	Coaticook, Que.
Parker, John Bruce	Ap. Sci. 2	2066 Retallack St., Regina, Sask.
Parker, Robert Allan	Com. 1	402 Albert St., Sault Ste. Marie, Ont.
Parkin, Cecil Harcourt	Med. 1	Anchovy Estate, Anchovy, Jamaica.
Parlow, Allan Laurence	Med. 5	411 McLaren St., Ottawa, Ont.
Parsons, Cecil James F.	Med. 5	Harbour Grace, Newfoundland.
Parsons, Gerda Parsons	Arts P	4251 Dorchester St., Westmount, Que.
Partridge, Sydney Charles	Ap. Sci. 2	190 Cooper St., Ottawa, Ont.
Pashley, Cuthbert Frith	Com. 1	607 Victoria Ave., Westmount, Que.
Paterson, Alexander Pierce	Ap. Sci. 2	92 Leinster St., St. John, N.B.
Paterson, Donald Kingsley	Ap. Sci. 2	43 Arlington Ave., Westmount, Que.
Paterson-Smyth, Geoffrey N.	Med. 2	160 Windsor St., Montreal, Que.
Patterson, Arthur Lindo	Arts 2 (B.Sc., Hon.)	3 Oxley Road, Watford, Herts, Eng.
Patterson, Keith William G.	Ap. Sci. 1	Earlham, Castle Hill, Parkstone, Dorset, England.
Patton, Eunice Irene	Arts 4 (Hon.)	Ormstown, Que.
Patton, Hugh Bradford	Ap. Sci. 4 (El.)	2017 Mance St., Montreal, Que.
Paxton, Dorothy Helen	Arts 4 (B.Sc.)	4854 St. Catherine St., Westmount.
Peacock, Henry Arthur	Med. 3	196 Herkimer St., Hamilton, Ont.
Peckarsky, Leo (Left October, 1922.)	Arts P	344 Colonial Ave., Montreal, Que.
Pelletier, René-Arthur	Ap. Sci. 4 (Mi.)	122 Ste. Famille St., Montreal, Que.
Pemberton, John Sigerist B.	Arts 1	618 Sherbrooke St. W., Montreal, Que.
Pendleton, Raymond King	Med. 3	Islesboro, Maine.
Pennington, Marjorie Jessie	Arts 3	63 St. Cyrille St., Quebec, Que.
Penrose, George Henry	Arts 2	Box 372, Leamington, Ont.
Pepin, Arthur Hoyt	Com. 3	R.R. No. 2, Shefford Mountain, Que.
Perrault, Charles-Gerald	Com. 1	16 Parkside Place, Montreal, Que.
Perrigard, George Maxim	Arts P	290 Bourgeois St., Montreal, Que.
Perrin, Kathleen Enid	Arts 2 (Hon.)	4319 Montrose Ave., Westmount, Que.
Perry, Alfred Leslie	Arch. 5	340 Oxford Ave., Montreal, Que.
Perry, Frances Helen	Arts 4 (Hon.)	301 Fortune St., Montreal, Que.
Perry, Millicent Audrey	Arts 3 (Hon.)	793 Shuter St., Montreal, Que.
Perry, Reginald Selby	Arch. 1	793 Shuter St., Montreal, Que.
Perry, Stanley Zinkan	Arts 1 (B.Sc.)	301 Fortune St., Montreal, Que.
Peters, Arthur Wright	Ap. Sci. 4 (El.)	414 Mackay St., Montreal, Que.
Peterson, James Norman	Med. 5	2297 Hutchison St., Montreal, Que.
Petrie, Edith	Arts 2	17 d'Aiguillon St., Quebec, Que.
Petrie, Edward Archibald	Med. 4 (5 Yr. Course)	3 Leonard Ave., Ottawa, Ont.
Pfeiffer, Walter Moodie	Med. 2	189 Grande Allée, Quebec, Que.
Phelps, Walter Sealing	Dent. 4	552 Earnscliffe Ave., Montreal, Que.
Phillips, Reginald Osmond	Med. 4 (6 Yr. Course)	15 Arnold Road, Kingston, Jamaica.
Philpott, Newell Willard	Med. 3	1722 Jarvis Ave., Chicago, Ill.
Phippen, Frank Gordon	Com. 1	307 Russell Hill Road, Toronto, Ont.
Phipps, Charles Ferdinand	Ap. Sci. 3 (El.)	Langford P.O., V.I., B.C.
Pick, Marjorie	Arst 4 (Hon.)	655 Cote St. Antoine Road, Westmount.
Pickel, Martin Reid	Dent. 4	Cowansville, Que.
Pidgeon, Nettie Amanda (Double Course, B.A., M.D.)	Arts 3 Med. 1	381 Northcliffe Ave., Montreal, Que.
Pierce, Sydney David	Law 1	724 Upper Belmont Ave., Westmount.
Pigot, Charles Hugh	Ap. Sci. 2	144 Grande Allée, Quebec, Que.
Pinhey, John Wolfenden	Med. 4 (5 Yr. Course)	Hudson Heights, Que.
Pinhey, Wilbur Harris	Ap. Sci. 2	Chelsea Apts., Bank St., Ottawa, Ont.

NAME	FACULTY AND YEAR	HOME ADDRESS
Pitt, William	Ap. Sci. 2	Santiago de Cuba, Cuba.
Plant, Herbert Arnold	Ap. Sci. 1	Port Antonia, Jamaica, B.W.I.
Plouffe, Lionel-Louis	Med. 2	82 Hamilton St., Southbridge, Mass.
Plow, Gordon Locklin	Ap. Sci. 4,3 (Ci.)	316 Kensington Ave., Westmount, Que.
Podvoll, Samuel Maxwell	Med. 3	11122-112th St., Woodhaven, N.Y.
Pollack, Joseph	Dent. 2	1479 St. Lawrence St., Montreal, Que.
Pollock, Thomas Douglas	Ap. Sci. 3 (Ci.)	396 Northcliffe Ave., Montreal, Que.
Pope, Charles Leslie	Med. 4 (5 Yr. Course)	Richmond, Que.
Pope, Caxton Temple	Med. 1	249 Cherry St., San Francisco, Cal.
Popliger, Sophie	Arts 1	734 Shuter St., Montreal, Que.
Poppo, Martin Joseph	Arts P	214 St. Antoine St., Montreal, Que.
Porter, Donald Francis W	Med. 4 (6 Yr. Course)	Fredericton, N.B.
Post, Gilbert Cameron	Med. 2	Whitney, Ont.
Potter, Carlyle Thornton	Med. 5	400 Outremont Ave., Outremont, Que.
Potter, Gabriel Julian C	Ap. Sci. 2	Goodwill, Dominica, B.W.I.
Potter, Walter Baden-Powell	Com. 1	148 Crawford St., Sarnia, Ont.
Powell, Allan Trew	Ap. Sci. 4 (Met.)	12 Allan Place, Ottawa, Ont.
Powell, Fraser Edwin	Ap. Sci. 4 (Me.)	52 Delaware Ave., Ottawa, Ont.
Poyas, Morton Louis	Med. 1	12 King St., St. John, N.B.
Pratt, William Frederick White	Law 2	399 Clarke Ave., Westmount, Que.
Prentice, Mona	Arts P	445 Sherbrooke St. W., Montreal, Que.
Presner, Jack Copple	Med. 4 (6 Yr. Course)	1497 St. Urbain St., Montreal, Que.
Presner, Samuel David	Pharmacy	56a Shearer St., Montreal, Que.
Pretty, Henry Gurth	Me. 4 (6 Yr. Course)	141 Hunter St. E., Peterboro, Ont.
Price, Frederick Avery	Ap. Sci. 2	c/o Price Bros. Co. Ltd., Quebec, Que.
Prichard, Olive Marguerite	Arts 2 (B.Sc.)	121 Quebec St., Sherbrooke, Que.
Primeau-Robert, Alphonse-J	Arts P	170 Parc Lafontaine, Montreal, Que.
Pringle, John Buchanan	Ap. Sci. 3 (El.)	167 Rozel St., Montreal, Que.
Procter, Arthur P	Med. 3	3637 Angus Ave., Vancouver, B.C.
Proulx, Lawrence Romée	Med. 1	Tupper Lake, N.Y.
Prudham, William Merrill (Double Course, B.A., B.Sc.)	Ap. Sci. 2	Drayton, Ont.
Puddicombe, George Beverly	Arts 4 (Hon.)	410 Queen St., Ottawa, Ont.
Puddicombe, John Francis	Med. 3	410 Queen St., Ottawa, Ont.
Punde, Herbert August	Com. 1	5 Sussex Ave., Montreal, Que.
Purcell, Harold Elston	Dent. 3	Huntingdon, Que.
Pye, Martin J (Left Jan. 23rd, 1923.)	Com. 1	Windsor, Que.
Quackenbush, Hugh Arnley	Med. 2	43 Florence St., Ottawa, Ont.
Quackenbush, James Gordon	Med. 4 (5 Yr. Course)	43 Florence St., Ottawa, Ont.
Quinlan, Harry Francis	Med. 1	Trout Creek, Ont.
Quinlan, John Joseph David	Com. 1	323 Redfern Ave., Westmount, Que.
Quinn, John Gladstone	Med. 5	352 Nepean St., Ottawa, Ont.
Rabinovitch, Boaz	Med. 2, 3	213 Laval Ave., Montreal, Que.
Rabinovitch, Issie	Arts 1	213 Laval Ave., Montreal, Que.
Rabinovitch, Jacob	Med. 4 (5 Yr. Course)	213 Laval Ave., Montreal, Que.
Rabinovitch, Phineas	Med. 4 (6 Yr. Course)	213 Laval Ave., Montreal, Que.
Rabinovitch, Reta	Arts P	163 Esplanade Ave., Montreal, Que.
Rabinovitch, Reuben Robert	Com. 3	163 Esplanade Ave., Montreal, Que.
Racey, Herbert John	Ap. Sci. 1	26 Winchester Ave., Westmount, Que.
Radley, Percy Edward	Ap. Sci. 4 (Chem. Eng.)	Renfrew, Ont.
Radmore, Arthur	Arts 4	Aylmer, Que.
Radway, Frank Saunders	Dent. 3	347 Maitland St., London, Ont.
Rafolovitch, David	Med. 2	29 Park Ave., Montreal, Que.
Rafolovitch, Joseph Samuel	Med. 2	29 Park Ave., Montreal, Que.
Rafolovitch, Moses Jacob	Med. 5	29 Park Ave., Montreal, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Raginsky, Bernard	Med. 2	468 Bloomfield Ave., Outremont, Que.
Rainnie, Ronald James	Ap. Sci. 4 (Me.)	88 Ste. Famille St., Montreal, Que.
Ramjohn, Mohamed Rahaman	Med. 4 (6 Yr. Course)	73 Cipers St., San Fernando, Trinidad.
Ramsay, Clyde Neville	Med. 4 (5 Yr. Course)	90 Undercliffe Road, Montclair, N.J.
Raney, Grace Cornelia	Arts P	Pembroke, Ont.
Rankin, Gerald Crisfield	Med. 4 (5 Yr. Course)	Parliament Bldgs., Edmonton, Alta.
Rankin, William Donald	Med. 2	Woodstock, N.B.
Ransom, Audrey Isabel	Arts P	18 Melbourne Ave., Westmount, Que.
Rapkine, Louis	Med. 2	356 Laval Ave., Montreal, Que.
Rapkine, Samuel Henry	Arts P	5 Groll Ave., Montreal, Que.
Rapp, Isidore	Arts 2 (Hon.)	335 de l'Epée Ave., Outremont, Que.
Ratner, Max	Med. 3	1774 Clarke St., Montreal, Que.
Ratner, Minnie	Arts 1	106 Marlowe Ave., Montreal, Que.
Ray, Walter Reginald G.	Ap. Sci. 3 (Me.)	142 St. Anne St., Quebec, Que.
Read, Douglas Ellery	Ap. Sci. 4 (Chem.)	37 Melbourne St., Sherbrooke, Que.
Read, Stanley M. Ellery	Arts 4 (Hon.)	59 Melbourne St., Sherbrooke, Que.
Reaper, Clarence Paul	Ap. Sci. 3 (Ci.)	1737 Esplanade Ave., Montreal.
Rearden, John Boyle	Med. 2	24 Arch St., Springfield, Mass.
Redmond, Arthur Douglas	Med. 3	Iroquois, Ont.
Redmond, James William	Med. 2	512 Broadway, So. Boston, Mass.
Ree, Alex	Ap. Sci. 2	1377 Davies St., New Westminster, B.C.
Reeves, René (Left October, 1922.)	Med. 1	469 Pius IX Blvd., Montreal, Que.
Reid, Eustace Arkindale	Pharmacy	Barbados, B.W.I.
Reid, Francis MacDonald	Arts 2 (Hon.)	Simcoe, Ont.
Reid, Howard Edward	Ap. Sci. 4 (Ci.)	Granville Ferry, N.S.
Reid, H. Gordon	Med. 4 (5 Yr. Course)	405 Devon Court, Winnipeg, Man.
Reid, Kenneth	Ap. Sci. 1	R.M.D. No. 1, Victoria, B.C.
Reid, Loyal Linton	Ap. Sci. 3 (El.)	St. John's, Newfoundland.
Reid, Robert Grant	Med. 2	Granville Ferry, N.S.
Reid, Thomas Francis	Med. 2	36 Milton St., North Andover, Mass.
Reitman, John (Left Jan. 23rd, 1923.)	Arts 1	Apt. 1, 2248 Hutchison St., Montreal.
Renaud, Varethe	Com. P Arts P	33 Nelson Ave., Outremont, Que.
Renouf, Edward T.	Ap. Sci. 4 (Me.)	718 Pine Ave. W., Montreal, Que.
Richardson, Arthur Douglas	Dent. 3	43 Ballantyne Ave. N., Montreal West.
Richardson, Charles Frederick	Med. 2	670 Sherbrooke St. W., Montreal, Que.
Richardson, Eric Carleton	Med. 4 (5 Yr. Course)	43 Ballantyne Ave. N., Montreal West.
Richardson, Roderick	Ap. Sci. 3 (El.)	Box 674, Westville, N.S.
Richstone, Samuel	Dent. 3	2266 St. Urbain St., Montreal, Que.
Ridgewell, Ernest Percy	Ap. Sci. 1	151 Drummond St., Montreal, Que.
Ridout, Andrew Maurice	Ap. Sci. 3 (Chem. Eng.)	150 Marlowe Ave., Montreal, Que.
Rinfret, Guy-Raoul	Ap. Sci. 1	173 Mansfield St., Montreal, Que.
Ritchie, John	Arts 1 (B.Sc.)	Ste. Anne de Bellevue, Que.
Rittenberg, Abraham Kramer	Med. 1	153 Vendome Ave., Montreal, Que.
Riva, Ronald Herrick	Ap. Sci. 2	237 Sherbrooke St. W., Montreal, Que.
Rivenovitch, Samuel	Med. 4 (6 Yr. Course)	1112 St. Urbain St., Montreal, Que.
Roach, Robert Dickson	Med. 4 (6 Yr. Course)	Tatamagouche, N.S.
Robb, Frank Morse	Com. P	4700 Western Ave., Westmount, Que.
Robb, Norman	Arts 2	1554 Mance St., Montreal, Que.
Robert, Lionel-Armand	Pharmacy	467 St. Hubert St., Montreal, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Roberts, Geo. Arthur Cunningham	Med. 4 (5 Yr. Course)	2061 Fourth Ave.E., Vancouver, B.C.
Roberts, Percie	Med. 3	92a Freshwater Road, St. John's, Nfld.
Robertson, Andrew	Ap. Sci. 1	1023 Belmont Ave., Victoria, B.C.
Robertson, Basil Duncan	Med. 2	155 Queen St., St. John, N.B.
Robertson, Carol Edna	Arts 3 (B.Sc., Hon.)	143 Bayle St., Montreal, Que.
Robertson, Charles West	Com. 2	39 Linton Apts. Montreal, Que.
Robertson, Florence Margaret	Arts P	143 Bayle St., Montreal, Que.
Robertson, Hugh Douglas	Arch. 3	46 Herkimer St., Hamilton, Ont.
Robertson, James Ritchie	Med. 4 (5 Yr. Course)	24½ S. Park St., Halifax, N.S.
Robertson, William Lewis	Arts 3 (B.Sc., Hon.)	118 Gilmour St., Ottawa, Ont.
Robidoux, Emery Peter	Dent. 4	Shediac, N.B.
Robillard, Antoine-Benjamin	Med. 5	Abbotsford, Que.
Robillard, Matthew Joseph	Med. 5	195 Nicholas St., Ottawa, Ont.
Robins, Jeannie Dougall	Arts 3 (Hon.)	314 Metcalfe Ave., Westmount, Que.
Robinson, Cecil S. K.	Com. 2	93 Devonshire Road, Walkerville, Ont.
Robinson, Harold Forrest	Ap. Sci. 3 (Chem. Eng.)	418 Mt. Stephen Ave., Westmount,Que.
Robinson, Jonathan	Law 3	Waterloo, Que.
Robinson, Leslie Gilbert	Dent. 4	Altario, Alta.
Robinson, Ruth Beverley (Double Course, B.Sc., B.H.S.)	Arts 1	Rothesay, N.B.
Robinson, Stewart Alton	Dent. 1	226 Prince Albert Ave., Montreal, Que.
Roche, Laurence Elmore	Med. 4 (5 Yr. Course)	37 Park Ave., Ottawa, Ont.
Rochester, Bertram Cole	Ap. Sci. 4 (El.)	825 University St., Montreal, Que.
Rochester, William Laurence	Ap. Sci. 3 (Chem. Eng.)	145 James St., Ottawa, Ont.
Rodger, W. Sherman (Double Course, B.A., M.D.)	Arts 2	Cowansville, Que.
Rogers, Beth	Arts P	Andover, N.B.
Rohrlick, Louis Henry	Law 1	1297 Cadieux St., Montreal, Que.
Rolleston, Philip Reginald	Sci. 2	Onderneeming Industrial School, Suddie Essequebo, Br. Guiana.
Rooke, Daphne Frances	Arts 4 (Hon.)	268 S. Luke St., Montreal, Que.
Roome, Frederick Charles E.	Ap. Sci. 2	Quamichan Lake, Duncans, B.C.
Roquet, Leo-Laurent	Ap. Sci. 4 (Me.)	109 Chapel St., Ottawa, Ont.
Rorke, Charles Burrell	Ap. Sci. 4 (El.)	1979 Hutchison St., Montreal, Que.
Rorke, Ruth Beatrice (Double Course, B.A., B.H.S.)	Arts 2	1979 Hutchison St., Montreal, Que.
Roseborough, Albert S.	Med. 4 (5 Yr. Course)	Vermilion, Alta.
Rosen, Ernest	Pharmacy	861 City Hall Ave., Montreal, Que.
Rosen, Florence	Arts P	810 Cote St. Antoine Road, Westmount.
Rosen, Leo (Left Nov. 15th, 1922.)	Arts 1	810 Cote St. Antoine Road, Westmount.
Rosenbaum, Saul	Med. 4 (6 Yr. Course)	475 St. James St., Montreal, Que.
Rosenbaum, Wilfrid Brandt	Med. 5	475 St. James St., Montreal, Que.
Rosenberg, Arthur Fabian	Dent. 1	2590 Park Ave., Montreal, Que.
Rosenblum, C. Moses	Arts P	P.O. Box 513, Glace Bay, B.C.
Rosenstein, Murray	Arts 4 (Hon.)	149 Simpson St., Sault Ste. Marie, Ont.
Rosenthal, Arthur A.	Med. 2	1589 Fairfield Ave., Westmount, Que.
Rosenthal, Max	Med. 1	1469 St. Urbain St., Montreal, Que.
Rosenthal, Sydney Norman	Arts P	48 Drolet St., Montreal, Que.
Rosovitch, Harold Hyman	Com. 1	65 Esplanade Ave., Montreal, Que.
Ross, Allan Simpsom	Med. 2	414 Bourgeois St., Montreal, Que.
Ross, Allan Evans	Arts 3	31 Bruce Ave., Westmount, Que.
Ross, Dorothy Vernon	Arts 3 (Hon.)	109 Crescent St., Montreal, Que.
Ross, Hugh Gordon	Ap. Sci. 2	15 Linden Terrace, Ottawa, Ont.
Ross, Hugh Graham	Med. 4 (5 Yr. Course)	414 Bourgeois St., Montreal, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Ross, James Brodie	Med. 4 (5 Yr. Course)	414 Bourgeois St., Montreal, Que.
Ross, James Forsyth	Com. 2	St. Louis Road, Quebec, Que.
Ross, Malcolm McGregor	Arts 2	165 Prince St., Charlottetown, P.E.I.
Ross, Malcolm Vaughan	Ap. Sci. 4 (El.)	111 Grande Allée, Quebec, Que.
Ross, Stewart Hamilton	Ap. Sci. 2	Stanstead, Que.
Ross, Trevor Durnford	Com. 1	660 Sherbrooke St. W., Montreal, Que.
Ross, William Brûce	Ap. Sci. 1	Coniston, Ont.
Rothwell, John Cecil	Med. 3	Lanark, Ont.
Rountree, Syble Thorne	Arts 3	445 Mt. Stephen Ave., Westmount.
Routledge, George Lawson	Med. 4 (5 Yr. Course)	Unity, Sask.
Rowan, Arthur Alexander	Med. 4 (5 Yr. Course)	Rowan Place, off Kennedy St., St. John, N.B.
Roy, Alice Rosslyn	Arts 4 (Hon.)	61 Norwood Ave., Ahuntsic, Que.
Roy, Helen	Arts P	55 Ave. du Bois, Paris, France.
Rubenstein, Charles S.	Med. 5	1,000 Orange St., Syracuse, N.Y.
Rubin, Anne Gertrude	Arts P	152 St. Joseph Blvd. W., Montreal.
Rubin, Nathan William	Med. 2	182 Prince Edward St., St. John, N.B.
Rubin, Saul	Med. 4 (5 Yr. Course)	1553 Esplanade Ave., Montreal, Que.
Rubinstein, Joseph	Arts 1	696 Cadieux St., Montreal, Que.
Rubinstein, Leo	Arts P	696 Cadieux St., Montreal, Que.
Rubinstein, Michael	Arts 1	696 Cadieux St., Montreal, Que.
Rudenko, Samuel David	Law 2	882 Notre Dame St. W., Montreal, Que.
Rudin, Louis	Med. 5	9024-112th Ave., Edmonton, Alta.
Rudman, Allan	Pharmacy	1159 Cadieux St., Montreal, Que.
Rudy, Riva	Arts P	986 St. Lawrence Blvd., Montreal, Que.
Rugh, Helen Stewart	Arts P	356 Cote St. Antoine Road, Westmount.
Rumpel, George Hilhorn	Ap. Sci. 3 (Chem. Eng.)	39 Cameron St. S., Kitchener, Ont.
Rusofsky, Harry	Med. 4 (6 Yr. Course)	604a Henri Julien Ave., Montreal, Que.
Russel, Dorothy Margaret	Arts 4	423 Guy St., Montreal, Que.
Russel, Eileen Disney	Arts 3 (Hon.)	423 Guy St., Montreal, Que.
Russell, Mary	Arts P	435 Mt. Pleasant Ave., Westmount.
Rutenberg, Leo	Med. 5	1008 St. Urbain St., Montreal, Que.
Rutherford, James Forest	Ap. Sci. 1	467 Mt. Pleasant Ave., Westmount.
Ryan, Charles Percival	Arts P	Watertown, N.Y.
Ryan, Joseph James	Med. 4 (5 Yr. Course)	33 Laporte Ave., Montreal, Que.
Ryan, Max	Med. 2	Sherman Hotel, Kansas City, Mo.
Saibil, Moses	Med. 1	2630a St. Urbain St., Montreal, Que.
St. George, Harry S. (Left Jan. 1923.)	Ap. Sci. 1	150 Crescent St., Montreal, Que.
St. John, Burton Marvin	Com. 1	61 West End Ave., Montreal, Que.
Salmon, Julius (Double Course, B.Sc., M.D.)	Arts 2	544 Cadieux St., Montreal, Que.
Salter, Reginald Arnold	Med. 3	Bridgetown, N.S.
Sammett, Jeannette Alexandra (Double Course, B.Sc., M.D.)	Arts 2	5258 Western Ave., Montreal, Que.
Sampson, Percy McKechnie	Arts P	113 Blenheim Place, Westmount, Que.
Samuelson, Isadore Samuel	Law 2 (LL.B.)	26 Decatur St., Burlington, Vt.
Sanders, Leslie Harvey	Arts 1	41 Suffolk St., Guelph, Ont.
Sanderson, Matthew Telford	Arts P	281 Charlevoix St., Montreal, Que.
Sangster, Muriel Isabel	Arts 2	100 Drummond St., Sherbrooke, Que.
Saunders, Leila Alexandria	Arts 1	Summerside, P.E.I.
Savage, Joseph Clifford	Law 3	186 St. Denis Ave., St. Lambert, Que.
Savage, Meyer Henry	Ap. Sci. 2	101 Hutchison St., Montreal, Que.
Savard, Lucien (Left October 1922.)	Ap. Sci. 1	407 Mt. Royal Ave. E., Montreal, Que.
Savoie, Paul	Ap. Sci. 1	238 St. Denis St., Montreal, Que.
Saylor, Wesley Clarence	Com. 2	Trenton, Ont.
Scanlan, Joseph René	Ap. Sci. 1	688 Charlevoix St., Montreal, Que.
Schachter, Moe M.	Pharmacy	20 Fairmount Ave. W., Montreal, Que.
Scharf, Joss Evans	Arts P	Edwards, Ont.

NAME	FACULTY AND YEAR	HOME ADDRESS
Scharfe, Ernest Edward	Med. 5	Billing's Bridge, Ont.
Scheffer, Isidor Herbert	Med. 4 (6 Yr. Course)	227 Laval Ave., Montreal, Que.
Scheffer, William	Dent. 1	227 Laval Ave., Montreal, Que.
Schiltz, Frances Helen	Med. 5	315 Third Ave. N., Saskatoon, Sask.
Schlee, Ronald	Ap. Sci. 2	c/o D. S. Marsh, Hunt & Co., 96 Water St., New York, N.Y.
Schleifer, Sol	Arts 2 (Hon.)	1669 Esplanade Ave., Montreal, Que.
Schelifstein, Joseph Isaac	Med. 4 (5 Yr. Course)	822 St. Lawrence Blvd., Montreal, Que.
Schleifstein, M. L.	Ap. Sci. 4 (Chemistry)	1941 Esplanade Ave., Montreal, Que.
Schlesinger, Israel Abraham	Med. 1	790 City Hall Ave., Montreal, Que.
Schofield, Frederick C.	Com. 1	48 Carleton St., St. John, N.B.
Schor, Frank Nathan	Arts P	35 Nelson Ave., Montreal, Que.
Schultz, Charles	Med. 5	268a Colonial Ave., Montreal, Que.
Schurman, Charles Good	Med. 5	Wolfville, N.S.
Schwartz, Hyman	Dent. 2	624 Notre Dame St. W., Montreal,Que.
Schwartz, Israel	Med. 2	777 Cadieux St., Montreal, Que.
Schwartz, Max Louis	Arts 1	844 City Hall Ave., Montreal, Que.
Schwartz, Sylvia	Arts 2 (Hon.)	62 Des Prairies, Québec, Que.
Schwartzman, Jacob (Double Course, B.Sc., M.D.)	Arts 4 Med. 2	655 St. Urbain St., Montreal, Que.
Schwisberg, Samuel Edgar (Left October, 1922.)	Law 1	2146 St. Urbain St., Montreal, Que.
Scobell, Sydney Clyfford L.	Com. 3	291 Prince Arthur St. W., Montreal.
Scofield, Clifford G.	Ap. Sci. 1	329 Roslyn Ave., Westmount, Que.
Scott, Gordon Hilbert	Med. 2	6037 Fraser St., Vancouver, B.C.
Scott, James McDonald	Ap. Sci. 4 (Me.)	Box 14, Valleyfield, Que.
Scott, Lewis John	Ap. Sci. 4 (Me.)	Grand Falls, Newfoundland.
Scott, Robert Kenneth	Com. 3	42 Willard Ave., Toronto, Ont.
Scott, Robert Maxwell	Med. 3	Wallaceburg, Ont.
Seagram, Joseph Edward F.	Ap. Sci. 1	Waterloo, Ont.
Seale, Lewis William	Com. 2	154 Maple Ave., Quebec, Que.
Seale, Milton	Ap. Sci. 2, 3	687 Atwater Ave., Westmount, Que.
Seaton, Charles Henry	Com. 1	Ottawa, Ont.
Secord, Frances Rebecca	Arts 1	4912 Sherbrooke St. W., Montreal, Que.
Segal, Benjamin Wolf	Med. 4 (5 Yr. Course)	136a Drolet St., Montreal, Que.
Segal, Mendel	Com. 3	154 St. Famille St., Montreal, Que.
Seidman, Moses Bernard	Arts 1	45 Nelson Ave., Outremont, Que.
Selzer, Julius L.	Med. 5	1702 Clay Ave., New York, N.Y.
Seman, Herman Joseph	Law 2 (LL.B.)	504 N. 2nd St., Philadelphia, Pa.
Sénécal, Hugo (Left October, 1922.)	Law 1	257 Clifton, Ave. Montreal, Que.
Sénécal, O.-U.-Jacques	Law 3	371 Beaconsfield Ave., Montreal, Que.
Sénécal, Joseph-Georges	Med. 4 (6 Yr. Course)	2594 Park Ave., Montreal, Que.
Serchuk, Sadie	Arts 1	91 St. Paul St., Quebec, Que.
Sessenwein, Laurence	Arts 3 (Hon.)	2 Amesbury Ave., Montreal, Que.
Shackell, Ralph Abner	Com. 2	38 Hutchison St., Montreal, Que.
Shaffer, Henry	Med. 2	205 Esplanade Ave., Montreal, Que.
Shane, Ethel	Arts P	Apt. 6, 709 St. Urbain St., Montreal.
Shapiro, Evelyn	Arts P	310 Marlowe Ave., Montreal, Que.
Shapiro, Sophia	Arts 2 (B.Sc.)	1198 St. Urbain St., Montreal, Que.
Sharpe, James MacDonald	Ap. Sci. 2	126 Lewis Ave., Westmount, Que.
Sharpe, Robert John (Left October, 1922.)	Ap. Sci. 2	17 Montcalm St., Sherbrooke, Que.
Sharples, Alice Murray	Arts 4 (Hon.)	Clarendon Hotel, Quebec, Que.
Sharples, William Henry	Ap. Sci. 2	756 Sherbrooke St. W., Montreal, Que.
Shatford, Reginald Alexander	Ap. Sci. 3 (Mi.)	1287 Davie St., Vancouver, B.C.
Shaver, Frank Wilson	Med. 5 (5 Yr. Course)	327 Westhill Ave., Montreal, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Shaw, Carl Esmond		
(Left Nov. 28th, 1922.)	Arch. 2	66 S. Park St., Halifax, N.S.
Shaw, Gerald Edison	Ap. Sci. 3	
	(Ci.)	218 Cameron Ave., Windsor, Ont.
Shaw, Laurie N. L.	Arts 1	774½ Bronson Ave., Ottawa, Ont.
Shaw, Robert Bruce	Med. 2	81 Tenth Ave. W., Vancouver, B.C.
Shea, Daniel Francis	Law 1	226 St. Martin St., Montreal, Que.
Sheets, Cecil C	Med. 5	Massena, N.Y.
Shepherd, John		
(Left October, 1922)	Ap. Sci. 1	342 Magdalen St., Montreal, Que.
Shepherd, William Francis	Arts 1	157 Edgehill Road, Westmount, Que.
Sherman, George Alexander	Med. 4	
	(5 Yr. Course)	Scotstown, Que.
Sherrard, Edwin Atwater	Ap. Sci. 4	
	(Me.)	1 Forden Ave., Westmount, Que.
Sherwin, Lewis	Pharmacy	1684 Clarke St., Montreal, Que.
Sherwood, Thomas Kilgore	Ap. Sci. 4	
	(Chem. Eng.)	74 Percival Ave., Montreal West.
Shier, Bruce Banks	Ap. Sci. 4	
	(El.)	859 Roslyn Ave., Westmount, Que.
Shirriff, Lillian Clementine	Arts 4	
	(Hon.)	Huntingdon, Que.
Shlakman, Leanora	Arts 4	
	(Hon.)	2281 St. Urbain St., Montreal, Que.
Shlakman, Victor	Ap. Sci. 3	
	(El.)	2281 St. Urbain St., Montreal, Que.
Shmerling, Harry	Pharmacy	43 Prince Arthur St. E., Montreal, Que.
Shorker, Philip	Dent. 2	1804 St. Urbain St., Montreal, Que.
Shortall, Wilbert Joseph	Ap. Sci. 2	704 Cote St. Antoine Road, Westmount.
Shotton, John Allison	Med. 1	P.O. Box 696, Kamloops, B.C.
Shotwell, John Stuart G	Ap. Sci. 4	
	(Chem. Eng.)	68 Somerset St. W., Ottawa, Ont.
Shpritser, Samuel	Arts 1	90 Laurier Ave. W., Montreal, Que.
Shuman, Lionel	Pharmacy	1775 St. Urbain St., Montreal, Que.
Silk, Claude Whitehall	Med. 3	5 Provost Road, London N.W. 3, Eng.
Silsby, Charles	Dent. 1	Aurora, Maine.
Silsby, Samuel Schappee	Med. 3	Aurora, Maine.
Silver, Alice	Arts 2	385 Beaconsfield Ave., Montreal, Que.
Silver, Lydia Rowe	Arts 1	459 Mt. Pleasant Ave., Westmount.
Silver, Philip George	Med. 5	459 Mt. Pleasant Ave., Westmount.
Silver, Ralph Charles	Arts 1	
	(B.Sc.)	Danville, Que.
Silverberg, Arvid Constantine	Med. 5	Korsnas, Finland.
Silverman, Beatrice Ida	Arts 1	753a City Hall Ave., Montreal, Que.
Silverman, David	Arts 1	525 St. Urbain St., Montreal, Que.
Silverman, Gertrude Anne		
(Double Course, B.Sc., M.D.)	Arts 2	1769 St. Lawrence Blvd., Montreal, Que.
Silverman, Levi	Com. 2	192 Dorchester St. W., Montreal, Que.
Silverman, Minnie Clarice	Arts 3	1769 St. Lawrence Blvd., Montreal.
Silverman, Norman	Pharmacy	850a Cadieux St., Montreal, Que.
Silverstone, Henry Leo	Arts 3	
	(Hon.)	640 St. Catherine St. W., Montreal.
Sim, Margaret McEwen	Law 3	
	(LL.B.)	403 Aqueduct St., Montreal, Que.
Simon, Morey Leonard	Dent. 4	1918 Jeanne Mance St., Montreal, Que.
Simon, Robert Carleton	Ap. Sci. 1	123 Bourbonnière St., Montreal, Que.
Simpson, Albert Edward	Ap. Sci. 4	
	(Ci.)	58 St. James Place, Winnipeg, Man.
Simpson, Harold Leslie	Med. 4	
	(5 Yr. Course)	Springhill, N.S.
Simpson, James Catanach	Ap. Sci. 4	
Left Oct. 10th, 1922)	(El.)	10 Oldfield Ave., Montreal, Que.
Simpson, Jeremiah Claude	Med. 4	
	(5 Yr. Course)	Bay View Mills, P.E.I.
Simpson, J. Ross	Com. 3	Sydenham, Dundas, Ont.
Simpson, R. Geoffrey	Dent. 1	
(Double Course, D.D.S., B.A.)	Arts 3	355 Melville Ave., Westmount, Que.
Simpson, Richard Landon	Ap. Sci. 4	
	(Ci.)	375 Beaconsfield Ave., Montreal, Que.
Sinclair, Harry	Arts P	247 Hampton Ave., Montreal, Que.
Sinclair, Harry Arthur	Med. 1	249 Hampton Ave., Montreal, Que.
Singer, Jack	Dent. 4	1093 St. Lawrence Blvd., Montreal.

NAME	FACULTY AND YEAR	HOME ADDRESS
Sise, Elizabeth Pettingilll	Arts P	295 Peel St., Montreal, Que.
Skeet, Harold James	Med. 4 (5 Yr. Course)	4 Meredyth Road, Barnes, Surrey, Eng.
Skelley, Albert James	Med. 4 (5 Yr. Course)	596 O'Connor St., Ottawa, Ont.
Skinner, George Ferguson	Med. 5	178 Queen St., St. John, N.B.
Skinner, William Kerr	Med. 5	823 University St., Montreal, Que.
Slack, Zerada	Arts 4	165 Cote des Neiges Road, Montreal.
Sladen, Charles Dermot	Ap. Sci. 2	R.R. No. 2, Billing's Bridge, Ont.
Sleeman, Bertram Austin	Com. 2	111 Waterloo Ave., Guelph, Ont.
Sloan, Ambrose Victor	Med. 4 (5 Yr. Course)	Vinton, Que.
Smallhorn, Edward Robert	Ap. Sci. 4 (Ci.)	7 Vendome Ave., Montreal, Que.
Smallman, Ralph Benjamin	Med. 4 (5 Yr. Course)	Wolfville, N.S.
Smeaton, William Charles V	Ap. Sci. 2	Abbotsford, Que.
Smith, Adam Wyndham S	Ap. Sci. 4 (El.)	Tuellyn, London, Ont.
Smith, Archie Ewart	Ap. Sci. 4 (El.)	536 Louise Ave., Brandon, Man.
Smith, Arthur James M	Arts 2 (Hon.)	79 Chesterfield Ave., Westmount, Que.
Smith, Bruce Taylor	Med. 4 (6 Yr. Course)	246 Oxford St. W., Moose Jaw, Sask.
Smith, Clifford Bliss	Med. 3	242 Clifton Ave., Montreal, Que.
Smith, Donald Flannery	Ap. Sci. 2	Sutton, Que.
Smith, Ebenezer K	Med. 5 (5 Yr. Course)	1825 Brandon Hill, Knoxville, Tenn.
Smith, Edgar Donald Spurr	Law 3 (LL.B.)	42 Roseberry Place, St. Thomas, Ont.
Smith, Frederick McIver	Arts 4 (Hon.)	55 Clandeboye Ave., Westmount, Que.
Smith, Hamilton Ellesmere	Ap. Sci. 2	4191 Sherbrooke St., Westmount.. Que.
Smith, Herbert Gordon	Med. 5	205 Rockland Road, St. John, N.B.
Smith, John Walter	Med. 5	Lachute, Que.
Smith, Larratt Hamilton	Arts 1	436 Sparks St., Ottawa, Ont.
Smith, Malcolm Kerr	Ap. Sci. 2	627 Berri St., Montreal, Que.
Smith, Muriel Thurston	Arts 1	129 Mayfair Ave., Montreal, Que.
Smith, Norma	Arts P	Apt. 41, 58 Metcalfe St., Montreal.
Smith, Paul Sherman	Arts 1	Hawkesbury, Ont.
Smith, Ralph Leaman	Arts 1	682 de l'Epée Ave., Montreal, Que.
Smith, Reginald James	Arts 2	58 McTavish St., Montreal, Que.
Smith, Robert Macfie	Ap. Sci. 4 (El.)	246 Oxford West, Moose Jaw, Sask.
Smith, Thomas Hayden	Ap. Sci. 1	2128a Blvd. Gouin, Montreal, Que.
Smith, Walton Harold Y	Med. 5	294 Lyon St., Ottawa, Ont.
Smith, William Ronald	Com. 2	205 Rockland Road, St. John, N.B.
Smyth, Desmond	Arts 1	758 University St., Montreal, Que.
Snow, Donald Kennedy	Arts 1	476 Mountain Ave., Westmount, Que.
Snow, Vernon Armell	Med. 2	283 Besserer St., Ottawa, Ont.
Snow, William Lowell	Com. 1	476 Mountain Ave., Westmount, Que.
Snowball, Robert Archibald	Ap. Sci. 1	307 Pine Ave. W., Montreal, Que.
Snyder, Earle	Ap. Sci. 3, 4 (Mi.)	Sc. Jacobs, Ont.
Snyder, Herbert Groff (Left October, 1922.)	Ap. Sci. 3 (Me.)	R.R. No. 1, Waterloo, Ont.
Socolow, Louis	Arts 1	41 Drolet St., Montreal, Que
Solomon, Saul	Arts 1	608 City Hall Ave., Montreal, Que.
Solloway, Edgar Dunn	Med. 3	1033 Pacific St., Vancouver, B.C.
Somerville, Cecil Gellatly	Com. 1	1720 Esplanade Ave., Montreal, Que.
Somerville, Donald Andrew	Dent. 2	Bristol Car Co., N.B.
Somerville, Lloyd Matthew	Arts 2	R.R. No. 4, Lanark, Ont.
Somerville, Wallace Bertram	Med. 5	Bristol, N.B.
Sommer, Isabel Henrietta	Arts 2 (Hon.)	107 Chomedy[St., Montreal Que.
Spector, Jack	Arts 4 (Hon.)	1564 Hutchison St., Montreal, Que.
Spence-Thomas, William J	Com. 2	Hazelwood Llandoff, No. Cardiff, South Wales.
Spencer, Christopher Lloyd	Com. 1	Cor. 49th Ave., West Blvd., Vancouver.
Sperber, Lionel Albert	Law 2	141 Mt. Royal Ave., Montreal, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Spiegel, Colin	Med. 1	237 Esplanade Ave., Montreal, Que.
Spier, Helen Winifred	Arts P	4015 Dorchester St., Westmount, Que.
Spiro, Charles	Med. 5	New Glasgow, N.S.
Spriggs, Robert Hayward	Ap. Sci. 4 (Ci.)	Box 111, Ste. Anne de Bellevue, Que.
Spriggs, William	Ap. Sci. 4 (El.)	Box 111, Ste. Anne de Bellevue, Que.
Sprince, Henry	Med. 5	81 Maple St., Lewiston, Me.
Stainsby, Wendell Johnson	Med. 4 (6 Yr. Course)	1004 Eastlake Ave., Saskatoon, Sask.
Stairs, Margaret Rosamund	Arts P	Maxwelton Apts., Sherbrooke St., Montreal, Que.
Stalker, Murray Raymond	Med. 4 (5 Yr. Course)	Richmond, Que.
Stanfield, Frank Thomas	Com. 3	Truro, N.S.
Star, Marcus	Dent. 1	103 Craig St. W., Montreal, Que.
Starke, Andrew Drake	Com. 2	100 Flora St., Ottawa, Ont.
Starratt, William Blair	Ap. Sci. 3 (Me.)	Dorchester, N.B.
Steacie, Edgar William R	Ap. Sci. 4 (Chem. Eng.)	353 Grosvenor Ave., Westmount, Que.
Steacy, Ethel Dorothy	Arts 2	1 Spruce St., Ottawa, Ont.
Steeves, Beverly Hall	Ap. Sci. 4 (Me.)	17 Union St., Moncton, N.B.
Steeves, William Albert	Arts P	Dorchester, N.B.
Steine, Ben Zion	Med. 4 (6 Yr. Course)	819 University St., Montreal, Que.
Stein, Hyman Herbert	Com. 1	1465 St. Urbain St., Montreal, Que .
Steine, Lyon (Double Course, B.Sc., M.D.)	Arts 3	819 University St., Montreal, Que.
Stein, William	Med. 3	95 Dorchester St. W., Montreal, Que.
Steinberg, Abraham	Dent. 2	1216 St. Urbain St., Montreal, Que.
Stephen, Gordon Robert	Ap. Sci. 4 (Ci.)	198 Belgrave Ave., Montreal, Que.
Stephen, Lloyd Emerson	Com. 3	168 Elgin St., Sault Ste. Marie, Ont.
Stethem, John Eric H	Ap. Sci. 3 (Ci.)	147 Westmount Blvd., Westmount,Que.
Stevens, Harold Maxwell	Com. 3	Amherst, N.S.
Stevens, Walter Oscar	Ap. Sci. 2	c/o A. E. Stevens, General Supt., C.P.R., Winnipeg, Man.
Stevenson, Frederick K	Law 2	590 Sherbrooke St. W., Montreal, Que.
Stewart, Audrey Elizabeth	Arts 4	Glenelm, Que.
Stewart, Donald Laughlin	Ap. Sci. 3 (Me.)	Dunvegan, Ont.
Stewart, Donald	Ap. Sci. 2	Sunnyside Ave. N., Lakeside, Que.
Stewart, Emma Cecile	Arts P	Brownsburg, Que.
Stewart, Horace Hinman	Com. 1	Beebe, Que.
Stewart, Hugh Miller (Left January, 1923.)	Ap. Sci. 2	Box 157, Fernie, B.C.
Stewart, John Archie	Med. 4 (6 Yr. Course)	R.R. No. 1, Kinburn, Ont.
Stewart, Robert Douglas	Arts 1	322 Marquette St., Montreal, Que.
Stewart, Robert Nelson	Arts 2	250 Selkirk St., Chatham, Ont.
Stilwell, Luther Hamilton	Dent. 2	48 St. Matthew St., Montreal, Que.
Stirling, Laurie Brodie	Ap. Sci. 4 (El.)	38 St. Matthew St., Montreal, Que.
Stock, Gerald Howard	Med. 4 (5 Yr. Course)	448 Cooper St., Ottawa, Ont.
Stockhausen, Joseph Methuen	Med. 2	Duncans, Jamaica, B.W.I.
Stocking, Mary Frances S	Arts 1	136 St. Anne St., Quebec, Que.
Stockwell, Aylmer Winchell	Ap. Sci. 4 (Chem. Eng.)	St. Johns, Que.
Stockwell, Henry P	Ap. Sci. 3 (Chem. Eng.)	Stanstead, Que.
Stokes, Robert John R	Com. P	78 Harvard Ave., Montreal, Que.
Stone, Albert Rendle	Arts 3	Windsor, N.S.
Stone, Cyril H	Arts P	743 University St., Montreal, Que.
Stone, William John	Arts P	171 Eastern Ave., Toronto, Ont.
Strange, Arnold	Arts 4	10 Lasalle Ave., Montreal South, Que.
Strapp, Gerald Antonio	Med. 3	Harbour Grace, Newfoundland.
Strapp, Oliver Baily	Arts P	Cape Croker, Ont.

NAME	FACULTY AND YEAR	HOME ADDRESS
Strathy, Rolph Lee A.		
(Left January, 1923.)	Ap. Sci. P.	128 McTavish St., Montreal, Que.
Straus, William Louis.		
(Left October 19th, 1922.)	Med. 2.	Alhambra Apts., Baltimore, Md.
Streadwick, Ralph Danell.	Ap. Sci. 4.	
	(Mi.)	Chesham, Half-Way-Tree, Jamaica.
Strean, Lyon Peter.	Dent. 4.	4695 Sherbrooke St., W., Montreal.
Stromberg, Rose.	Arts 1.	275 de l'Erée Ave , Outremont, Que.
Stuart, Hugh Alexander.	Med. 1.	169 Park St., Sydney, N.S.
Sulis, Ernest Noel.	Med. 5.	1034-14th Ave. W., Calgary, Alta.
Sullivan, Joseph Kenneth.	Med. 4.	
	(6 Yr. Course)	Alexandra St., St. John, N.B.
Sullivan, William Cuthbert.	Dent. 1.	Williamstown, Ont.
Sutton, J. Carl.	Med. 1.	Gaspé, Que.
Summers, Carman Wellington.	Arts 1.	18 Stewart St., Ottawa, Ont.
Suwala, Stephen.		
(Left Feb. 28th, 1923.)	Med. 1.	Forudno, Yaworir, Ukrainier.
Sweet, Arthur Henry.	Med. 4.	
	(5 Yr. Course)	Thornhill, Man.
Sweny, George William.	Ap. Sci. 3.	
	(Met. Eng.).	R.M.D. No. 4, Victoria, B.C.
Swetnam, William Stanley.	Dent. 3.	49 Weldon St., Moncton, N.B.
Swift, Earle Leopold.	Arts 1.	Antigua, B.W.I.
Tabb, Walter Horatio.	Pharmacy.	168 Nicolet St., Montreal, Que.
Tait, Marjorie Jean.	Arts 4.	St. Laurent, Que.
Tait, Mildred.	Arts P.	Bainsville, Ont.
Tait, Robert M.	Med. 4.	
	(5 Yr. Course)	798 Clarke St., Montreal, Que.
Talbot, William Edward.	Arts 1.	Hamilton, Bermuda.
Talpis, Veeta Helen.	Arts 1.	50 Arlington Ave., Westmount, Que.
Tanner, Charles William.	Dent. 4.	1917 Angus St., Regina, Sask.
Tanzman, Joseph.	Med. 2.	22 Clarence St., St. John, N.B.
Taprell, William Rees.	Com. 3.	823 Royal Ave., Calgary, Alta.
Tarshis, Anne.	Med. 5.	187 Bloomfield Ave., Outremont, Que.
Taschereau, Rogers H.	Ap. Sci. 4.	
	(Mi.)	341c Kenniston Apts., Elgin St., Ottawa.
Tatleman, Maurice.	Med. 1.	2108 St. Urbain St., Montreal, Que.
Tatley, Herbert Baptist.	Ap. Sci. 1.	45 Durocher St., Montreal, Que.
Taylor, Clarence Wesley.	Ap. Sci. 4.	
	(Me.)	Carberry, Man.
Taylor, Eric Owen.	Med. 4.	
(Died Nov. 7th, 1922.)	(5 Yr. Course)	Ladner, B.C.
Taylor, John Albert.	Ap. Sci. 3.	
	(Chem. Eng.)	181 Oxford St., Halifax, N.S.
Taylor, John Alexander.	Arts P.	c/o The Diamond, Lifford, Co. Donegal, Ireland.
Taylor, John Neil.	Med. 2.	Almonte, Ont.
Taylor, Lorne Elson.	Ap. Sci. 3.	
	(El.)	196 Victoria Ave., Longueuil, Que.
Taylor, Robert Donald.	Law 3.	
	(LL.B.)	107 Cote St. Antoine Road, Westmount.
Taylor, St. Elmo Edward.	Med. 3.	87 Lexington Ave., Brooklyn, N.Y.
Taylor, Thomas Alex. Wade.		
(Left Jan. 1923.)	Com. 2.	Grand Falls, N.B.
Taylor, Willard Davidson.	Ap. Sci. 2.	14 McDougall Ave., Ottawa, Ont.
Teakle, Cecil Thomas.	Arts 3.	4063 Dorchester St. W., Westmount.
Teakle, Harold Percival.		
(Double Course, B.Sc., M.D.).	Arts 1.	4063 Dorchester St. W., Westmount.
Teed, Dorothy Isobel.	Arts 4.	119 Hazen St., St. John, N.B.
Tegart, Dorothy May.	Med. 3.	375 Prud'homme Ave., Montreal, Que.
Teitelbaum, Michael Henry.	Med. 4.	
	(5 Yr. Course)	565 Drolet St., Montreal, Que.
Temkin, Leo.		
(Left Dec. 1922.)	Pharmacy.	103 Pine Ave., Montreal, Que.
Tennant, Ralph Cowan.	Arts 1.	156 Easton Ave., Montreal West, Que.
Terrance, Emmett Howard.	Ap. Sci. 4.	
	(El.)	538 King Edward Ave., Ottawa, Ont.
Terroux, Arthur-Maguire.	Law P.	129 Crescent St., Montreal, Que.
Terroux, Fernand-Richard.	Arts 2.	
	(B.Sc., Hon.)	129 Crescent St., Montreal, Que.
Terry, Kingsley.	Med. 4.	
	(5 Yr. Course)	1220 St. James St., Victoria, B.C.

NAME	FACULTY AND YEAR	HOME ADDRESS
Thaw, Daniel	Med. 2	315 St. Dominique St., Montreal.
Theriault, Omer-Philippe	Ap. Sci. 1	770 Cadieux St., Montreal, Que.
Thomas, William John	Com. 1	1076 Delorimier Ave., Montreal, Que.
Thompson, Cecil E	Ap. Sci. 4 (Ci.)	157 Frank St., Ottawa, Ont.
Thompson, Clifford Shaw	Med. 4 (6 Yr. Course)	North Sydney, N.S.
Thompson, Frederick Clarence	Dent. 1	157 Frank St., Ottawa, Ont.
Thomson, Helena Barbara	Arts 3 (Hon.)	5229 Sherbrooke St., Montreal, Que.
Thompson, Mary Ethel	Arts P	157-17th Ave., Lachine, Que.
Thomson, Richard	Ap. Sci. 1	R.M.D. No. 1, Saanichton P.O., Victoria, B.C.
Thompson, William	Arts P	2658 Hutchison St., Montreal, Que.
Thurber, Donald Stuart	Med. 4 (6 Yr. Course)	Millerton, N.B.
Thurston, Willard Geddes	Med. 5	Maple Creek, Sask.
Tidmarsh, Clarence Johnson	Med. 4 (5 Yr. Course)	Charlottetown, P.E.I.
Timmins, Leo Henry	Ap. Sci. 3 (Mi.)	99 Gordon Crescent, Montreal, Que.
Timmis, Harold Gordon	Ap. Sci. 4 (Me.)	269 Bloomfield Ave., Passaic, N.J.
Tinkess, Donald Ewing	Med. 4 (6 Yr. Course)	Watertown, N.Y.
Toker, Maxwell H	Dent. 3	1570 Esplanade Ave., Montreal, Que.
Tombs, Laurence Chalmers	Arts 3 (Hon.)	503 Mt. Pleasant Ave., Westmount.
Toole, Francis James	Ap. Sci. 4 (Chem. Eng.)	1 Orleans Road, Hornsey Lane, Highgate, London, N. 19, England.
Toplitsky, Jacob	Dent. 3	66a Laurier Ave. W., Montreal, Que.
Touzel, Eugene	Med. 1	Renfrew, Ont.
Trapp, Ethelyn	Med. 2	New Westminster, B.C.
Tremain, Albert Edward D	Com. 3	Kingscroft, Windsor, N.S.
Trenholme, George Henry	Ap. Sci. 3 (Me.)	601 Clarke Ave., Westmount, Que.
Trites, Albert Edward	Med. 4 (5 Yr. Course)	Salisbury, N.B.
Trott, Harold William	Med. 4 (5 Yr. Course)	Mount Brydges, Ont.
Tucker, Bryant Burgess	Ap. Sci. 4 (Me.)	Elstree, Herts, England.
Tucker, William Louis (Left October 4th, 1922.)	Med. 5 (5 Yr. Course).	106 Erie St., Amigari, Ont.
Turcotte, Edward J	Arch. 4	Sherbrooke, Que.
Turley, Regina Mary	Arts 2	Frankford, Ont.
Turnbull, Andrew Rutherford	Ap. Sci. 4 (Met. Eng.)	934 James Ave., Niagara Falls, N.Y.
Turner, Arthur Lawrence	Arts 3 (Hon.)	13 Mount Pleasant, Liverpool, Eng.
Turpel, William Nicholson	Med. 4 (6 Yr. Course)	2551 Quadra St., Victoria, B.C.
Tyrrell, Kenneth Walter	Pharmacy	15 Plateau St., Montreal, Que.
Upton, Harold Samuel	Ap. Sci. 1	45 Windsor Ave., Westmount, Que.
Urquhart, Robert G. M	Med. 4 (5 Yr. Course)	Apt. 418, 26 Buckingham Ave., Montreal.
Usher, Abraham	Com. 2	382 Metcalfe Ave., Westmount, Que.
Usher, Peter Joseph	Law 2	1509 Mance St., Montreal, Que.
Vadenais, Martha	Arts P	39 St. Famille St., Montreal, Que.
Vallières, Joseph-Léon	Med. 4 (6 Yr. Course)	57 Center St., Biddeford, Me.
Vango, Harold Main	Med. 5	56 Talbot Road, London, Eng.
Van Etten, Fred Bouton	Arch. 5	156 Wall St., Kingston, N.Y.
Vanier, Emile	Arts P	St. Jerome, Que.
Van Koughnet, Edward M	Ap. Sci. 3 (El.)	14 St. Helen St., Montreal, Que.
Van Vliet, George Lyman	Arts 4	Lacolle, Que.
Van Wagner, Floyd Marcellus	Arts P	Hyde Park-on-the-Hudson, N.Y.
Vaughan, James M	Med. 5	105 Lorraine Ave., Mount Vernon, N.Y.
Vaz, Clarence	Med. 2	155 King St., Kingston, Jamaica.
Vega, Clemente Daniel	Arts P	1012 St. James St., Montreal, Que.

NAME	FACULTY AND YEAR	HOME ADDRESS
Velasco, Edward M	Ap. Sci. 4 (Me.)	83 Drolet St., Montreal, Que.
Vernot, George Edward	Ap. Sci. 2	293 St. George St., Montreal, Que.
Vézina, Frank A. (Double Course, B.Sc., M.D.) (Left October, 1922.)	Arts 2	119 Desery St., Montreal, Que.
Vickerson, George Locker	Ap. Sci. 2	277 Regent Ave., Montreal, Que.
Vineberg, Arthur Martin (Double Course, B.Sc., M.D.)	Med. 1 Arts 3	324 Elm Ave., Westmount, Que.
Vineberg, Evelyn Annie	Arts P	324 Elm Ave., Westmount, Que.
Vineberg, Norman Maxwell	Med. 4 (5 Yr. Course)	1518 Mance St., Montreal, Que.
Voisard, Amaury-Charles (Left Jan. 1923.)	Arts 1	138 De Grandpre St., Montreal, Que.
Voisard, Juliette-Thérèse	Arts 1	138 De Grandpre St., Montreal, Que.
Volpe, Edith Mary	Arts 1	226 Villeneuve Ave. W., Montreal, Que.
Vrooman, Harold William	Ap. Sci. 4 (Chem. Eng.)	109 Kildare Road, Walkerville, Ont.
Wade, Robert Simpson	Med. 4 (6 Yr. Course)	Renfrew, Ont.
Wadsworth, Gordon Campbell	Arts 4 (Hon.)	345 Harvard Ave., Montreal, Que.
Wainer, Isidore Joseph	Arts 3 (Hon.)	1113 St. Dominique St., Montreal, Que.
Wait, Frederick Elmer	Med. 5	814 Saskatchewan Crescent East, Saskatoon, Sask.
Wait, Philip Aylmer	Com. 1	169 Clemow Ave., Ottawa, Ont.
Waldman, Herbert (Left Jan. 1923.)	Arts 1 (B.Sc.)	147 St. Luke St., Montreal, Que.
Walker, Arthur Judson	Med. 4 (5 Yr. Course)	Halifax, N.S.
Walker, Douglas William	Med. 4 (6 Yr. Course)	6150 Sherbrooke St., Montreal, Que.
Walker, Reginald James	Arts 1 (B.Sc.)	6150 Sherbrooke St., Montreal, Que.
Wall, Bernard William	Ap. Sci. 1	48 Mary Anne St. W., Montreal, Que.
Wall, John Joseph	Med. 3	Apt. A, 222 Florence St., Ottawa, Ont.
Wallace, Arthur William	Arch. 2	6 Ravenscliffe Ave., Hamilton, Ont.
Wallace, Frank Wilbert	Med. 5	P.O. Box 622, Nelson, B.C.
Walsh, Anita	Arts 1	204 East Main St., Morris, Ill.
Walsh, Bernard Lorenzo	Com. 1	Canso, N.S.
Walsh, Eva Mary	Arts 1	469 Mackay St., Montreal, Que.
Walsh, Gerald Joseph	Arts P	754 Hartland Ave., Montreal, Que.
Walsh, Muriel Helena	Arts 1	754 Hartland Ave., Outremont, Que.
Walsh, Ronald Joseph	Med. 4 (6 Yr. Course)	408 Park St., Sydney, N.S.
Walsh, William Edwin (Left Dec. 1922.)	Med. 1, 2	Hawkeye, Ia.
Walter, Albert Joshua P	Ap. Sci. 1, 2	Royal Alfred Observatory, Mauritius.
Walter, Felix Harold	Arts 4 (Hon.)	635 University St., Montreal, Que.
Walters, Albert Robert	Med. 2	P.O. Box 271, Lennoxville, Que.
Ward, Clifford Vincent	Med. 3	Waterville, Que.
Ward, Peter Dennis	Med. 4 (5 Yr. Course)	216 Mance St., Montreal, Que.
Ward, Richard Vance	Med. 4 (5 Yr. Course)	825 de l'Epée Ave., Montreal, Que.
Ward, Ruth	Arts 1 (B.Sc.)	446 Durocher Ave., Outremont, Que.
Wardleworth, Theophilus H	Ap. Sci. 2	168 Cote St. Antoine Road, Westmount.
Warren, Francis Bishop	Ap. Sci. 3 (Ci.)	45 Hambly Ave., Toronto, Ont.
Warren, Geoffrey McDougall	Ap. Sci. 2	Penticton, B.C.
Warren, James Frederic (Left Jan. 1923.)	Arts 1	36 Edgar Ave., Toronto, Ont.
Warren, William Adelbert	Ap. Sci. 3 (El.)	8 Eleventh Ave., Lachine, Que.
Watkins, Ellie	Arts P	453 Sherbrooke St., Montreal, Que.
Watson, Charles Arthur	Med. 5	1557 Yale St., Victoria, B.C.
Watson, David Scott	Dent. 1	564 Champagneur St., Montreal, Que.
Watson, Edmond Evelyn	Ap. Sci. 2	New Yarmouth Race Course P.O., Jamaica, B.W.I.

NAME	FACULTY AND YEAR	HOME ADDRESS
Watson, Jessie Alexandra R.	Arts 1	660 Belmont Ave., Westmount, Que.
Watson, Leigh Alexander	Com. 3	Thamesville, Ont.
Watson, Walter John H.	Med. 1	420 Hampton Ave., Montreal, Que.
Watson, Wiliam	Ap. Sci. 3 (El.)	84 Springdale St., St. John's, Nfld.
Watt, Leslie Alexander	Arch. 5	Ste. Anne de Bellevue, Que.
Waxman, Abe	Med. 5	849 Cadieux St., Montreal, Que.
Way, Joseph Harold G.	Law 3 (LL.B.)	Bonavista, Newfoundland.
Weames, Albert James	Ap. Sci. 2	566 Maitland St., London, Ont.
Webb, Frederick Thomas	Com. 1	330 Liverpool St., Montreal, Que.
Weber, Jack	Arts 1	750 City Hall Ave., Montreal, Que.
Webster, Bruce Peck	Med. 4 (6 Yr. Course)	Lansdowne, Ont.
Webster, Colin Wesley	Arts 3 (Hon.)	7 Edgehill Road, Westmount, Que.
Webster, James Stewart	Ap. Sci. 1	96 Fourth Ave., Ottawa, Ont.
Webster, Leith Hillman	Med. 4 (5 Yr. Course)	Marie, P.E.I.
Webster, Lindsay Percival	Com. 1	84 Lorne Ave., St. Lambert, Que.
Webster, Robert Chilion P.	Ap. Sci. 4 (Me.)	196 Metcalfe St., Ottawa, Ont.
Wechsler, Jacob Jackson	Med. 4 (6 Yr. Course)	3538 Douglas Blvd., Chicago, Ill.
Weiman, Maurice	Med. 1	567 Laval Ave., Montreal, Que.
Weinrauch, Emmanuel Louis	Pharmacy	1199 St. Urbain St., Montreal, Que.
Weir, Ronald Stanley	Ap. Sci. 1	756 Sherbrooke St. W., Montreal, Que.
Weisburg, Casper	Ap. Sci. 3 (El.)	1063 St. Urbain St., Montreal, Que.
Weisburg, Hyman Maurice	Med. 1	1227 St. Lawrence Blvd., Montreal.
Wells, Hubert	Arts 4 (Hon.)	Wesleyville, Newfoundland.
Wener, William Victor	Med. 2	1127 Clarke St., Montreal, Que.
Wetmore, Katherine Stewart	Arts 1	St. John, N.B.
Wetmore, Douglas Stevenson	Ap.Sci. 4 (Chem. Eng.)	825 University St., Montreal, Que.
Wevrick, Noah (Double Course, B.Sc., M.D.)	Med. 1 Arts 3	489a Henri Julien Ave., Montreal, Que.
Wevrick, Solomon	Arts 3 (Hon.)	489a Henri Julien Ave., Montreal, Que.
Whalen, Harold Joseph	Dent. 1	Tamworth, Ont.
Wheatley, Rupert Adams	Dent. 1	657 Belmont Ave., Westmount, Que.
Wheeler, John Rodney	Arts 2	R.R. No. 1, Knowlton, Que.
Whelan, Peter Graeme	Arts P	260 Somerset St., Ottawa, Ont.
Whidden, Robert Wallace	Med. 2	805 Linden Ave., Victoria, B.C.
White, Charles Leslie (Left October 30th, 1922.)	Arts P	Bristol, Indiana.
White, David de Jersey (Double Course, B.A., M.D.)	Arts 1	597 Union Ave., Montreal, Que.
White, George Milburn	Med. 4 (5 Yr. Course)	Box 116, Marysville, N.B.
White, Thomas Nash	Arts 1 (B.Sc.)	100 Easton Ave., Montreal West, Que.
Whitehead, Wallace Irwin	Arts 1	287 Clifton Ave., Montreal, Que.
Whiteside, W. Carleton	Med. 2	2538 Quadra St., Victoria, B.C.
Whiting, Richard Charles	Med. 5	51 Robinson St., Hamilton, Ont.
Whitley, Harry Thomas C.	Med. 5	593 Besserer St., Ottawa, Ont.
Whitmore, Cecil Humphrey	Arts 4	Maxville, Ont.
Whittall, Ralph Lewis	Ap. Sci. 2	544 Roslyn Ave., Westmount, Que.
Whittemore, Carl Raymond	Ap. Sci. 4 (Met. Eng.)	Trail, B.C.
Wickham, Leo Paul	Law 1	408 Victoria Ave., St. Lambert, Que.
Wickwire, James Leander	Ap. Sci. 3 (Ci.)	Kentville, N.S.
Wight, G. Earle	Med. 4 (6 Yr. Course)	465 Moreau St., Montreal, Que.
Wiggins, Reginald Heber	Med. 4 (5 Yr. Course)	Sackville, N.B.
Wightman, Lyall McGregor	Com. 3	43 Woodlawn Ave., Ottawa, Ont.
Wighton, J. Lean E.	Arts 4	134 Abbott Ave., Montreal, Que.
Wilanski, Karine	Arts P	341 Esplanade Ave., Montreal, Que.
Wilkes, J. F. Ransom	Law 3	Hyrneham, Brantford, Ont.

NAME	FACULTY AND YEAR	HOME ADDRESS
Wilkie, Archibald Leslie	Med. 5	Antigonish, N.S.
Wilkinson, George	Arts 3 (Hon.)	Grand Falls, Nfld.
Willard, Eugene Wallace	Arts 4 (Hon.)	Montmorency Falls, Que.
Williams, Frances Eileen	Arts 1	185 Germain St., St. John, N.B.
Williams, Fred Nelson	Com. 2	Brysonville, Que.
Williams, Harold Miles	Ap. Sci. 2	300 Prince Arthur St. W., Montreal.
Williams, John Basil	Arts P	95 Arlington Ave., Westmount, Que.
Williams, Lewis Henry (Left October, 1922.)	Ap. Sci. 2	East Broughton Station, Que.
Williams, Robert Lyman	Arts 1	44 Trafalgar Ave., Montreal, Que.
Williams, Sydney Waldron	Ap. Sci. 4 (Chem. Eng.)	69 Esplanade St., Quebec, Que.
Williamson, Ruth Alexandra	Arts 1	4020 Dorchester St., Westmount, Que.
Willoughby, Gerald Woodrow	Com. 3	64 Powell Ave., Ottawa, Ont.
Willson, Reta Ethel	Arts 4	2234 Park Ave., Montreal, Que.
Wilson, Blake Manning	Com. 2	1238 Tecumseh Ave., Vancouver, B.C.
Wilson, Clifford Parnell	Com. 3	Cedarhurst, Sault Ste. Marie, Ont.
Wilson, Cyril Thomas R. (Left Jan. 1923.)	Ap. Sci. 3 (El.)	242 Union St., Moncton, N.B.
Wilson, Dudley Bazin	Arts 2 (Hon.)	320 Northcliffe Ave., Montreal, Que.
Wilson, Evelyn Christina E.	Arts 1	450 Grosvenor Ave., Westmount, Que.
Wilson, Frederick William	Ap. Sci. 2	46 Belvedere Road, Westmount, Que.
Wilson, George Andrew	Med. 4 (5 Yr. Course)	R.R. No. 2, Kars, Ont.
Wilson, Gilbert	Ap. Sci. 3 (El)	Elmhurst, Kendal, England.
Wilson, Harold Stockdale (Left Jan. 1923.)	Ap. Sci. 3 (Mi.)	Indian Head, Sask.
Wilson, Horace Orvil	Med. 4 (5 Yr. Course)	9917-85th Ave., Edmonton, Alta.
Wilson, Milton Clayton	Med. 2	701 Baker St., Baltimore, Md.
Wilson, Percy Roy	Arch. 4	Cedarhurst, Sault Ste. Marie, Ont.
Wilson, Richard Biggerstaff	Com. 2	1770 Rockland Ave., Victoria, B.C.
Wilson, Ross	Com. 2	608 St. Charles St., Victoria, B.C.
Wilson, William Holister	Arts 4 (Hon.)	150 Drummond St., Montreal, Que.
Wilson, William Robert	Arts 3	Athelstan, Que.
Wilson, Valentine Wm. G.	Ap. Sci. 1	756 University St., Montreal, Que.
Windsor, Frank	Com. 2	389 Clarke Ave., Westmount, Que.
Winn, A. Reginald	Arts 4 (Hon.)	32 Springfield Ave., Westmount, Que.
Winslow, Terence Hansard	Com. 3	297 Prince Arthur St. W., Montreal.
Winter, Francis Edward	Ap. Sci. 1	4684 Westmount Ave., Westmount, Que.
Winter, Jacob Walter	Med. 3	1900 Hutchison St., Apt. 7, Montreal.
Wiselberg, Dorothy (Double Course, B.A., M.D.)	Arts 1	3 Holton Ave., Westmount, Que.
Witmer, Earl Robert W.	Com. 1	32 Palmerston Ave., Brantford, Ont.
Wittenberg, Arthur Abraham	Med. 3	1512 Ontario St. E., Montreal, Que.
Wolepor, Benjamin	Med. 4 (6 Yr. Course)	68 Seventh Ave., Lachine, Que.
Wolf, Isador Judah	Med. 1	2 Park Road, Paterson, N.J.
Wolfson, Charles	Arts P	3156 St. Lawrence Blvd., Montreal.
Wolofsky, Max (Double Course, B.A., M.D.)	Arts 2	91 Esplanade Ave., Montreal, Que.
Wood, James	Ap. Sci. 2	764 Transit Road, Oak Bay, Victoria, British Columbia.
Wood, Ralph Peirse	Med. 3, 4 (6 Yr. Course)	380 Main St., Everett, Mass.
Wood, Robert	Ap. Sci. 3 (El.)	260 Regent Ave., Montreal, Que.
Woodhouse, Douglas Hamilton	Arts 4 (Hon.)	67 McTavish St., Montreal, Que.
Wood-Legh, Kathleen Louise	Arts 4 (Hon.)	237 Decarie Blvd., Montreal, Que.
Woodley, Edward Henry (Double Course, B.A., M.D.)	Arts 2	216 Girouard Ave., Montreal, Que.
Woodman, John Bernard	Dent. 4	241 Douglas Ave., St. John, N.B.
Woodruff, Richard S.	Med. 2	19 Bartlett Ave., Pittsfield, Mass.

NAME	FACULTY AND YEAR	HOME ADDRESS
Woods, Sidney John S.	Arts 3 (B.Sc., Hon.)	68 Le Marchant Road, St. John's, Nfld.
Woods, Walter Hamilton	Ap. Sci. 4 (Mi.)	R.M.D. No. 4, Victoria, B.C.
Woodward, Donald Eakins	Com. 1	579 St. Joseph St., Lachine, Que.
Woollcombe, George Andrew	Com. 1	2 Cloverdale Road, Ottawa, Ont.
Woollcombe, Edward Mickle	Ap. Sci. 4 (Me.)	2 Cloverdale Road, Ottawa, Ont.
Woolley, Grange (Left October 11th, 1922.)	Arts 1	341 Melrose Ave., Montreal, Que.
Woolsey, George Roy	Ap. Sci. 3 (El.)	Thetford Mines West, Que.
Workman, Ephraim	Med. 2	10 Stanley St., Montreal, Que.
Worrall, Alice	Arts 2 (B.Sc., Hon.)	39 Hadley St., Cote St. Paul, Montreal.
Wright, James Gibson	Ap. Sci. 1	415 Victoria Ave., Westmount, Que.
Wright, John Andrew	Med. 1	565 West 185th St., New York, N.Y.
Wylde, Charles Napier	Ap. Sci. 4 (Me.)	101 Crescent St., Montreal, Que.
Wylie, Robert Harold	Arts 2	Hallville, Ont.
Wyse, James Wilson	Ap. Sci. 3 (Ci.)	Moncton, N.B.
Yamikischak, John	Med. 5	Pleasant Home, Manitoba.
Yanovitch, Henry	Com. 3	1638 Esplanade Ave., Montreal, Que.
Yaros, Harry	Arts 1	705 Cadieux St., Montreal, Que.
Yelin, Anna	Arts P	49a St. Famille St., Montreal, Que.
Yerxa, Alfred Cliff	Com. 1	324 North St., Fredericton, N.B.
York, Geoffrey Wilson B	Med. 3	112 Strathcona Ave., Ottawa, Ont.
Yorston, Frederic Harrison	Ap. Sci. 4 (Chem. Eng.)	2094 Park Ave., Montreal, Que.
Young, John Melvin	Ap. Sci. 1	1152 Lajoie Ave., Outremont, Que.
Young, Margaret Ellegood	Arts P	15 Aberdeen Ave., Westmount, Que.
Zappa, Joseph-Armand	Law 1	294 Nicolet St., Montreal, Que.
Zaltsman, Eva	Arts 1	236 Colonial Ave., Montreal, Que.
Zaritsky, Alexander	Arts P	Ste. Sophie, Co. Terrebonne, Que.
Zinck, Russell Clark	Med. 4 (5 Yr. Course)	Box 122, Chester, N.S.
Zuckerman, Joshua	Med. 4 (6 Yr. Course)	133 Rachel St., Montreal, Que.

STUDENTS IN ATTENDANCE.

SESSION 1922–1923

ARTS.	Undergraduates.
First Year—Men	142
Women	64
Second Year—Men	79
Women	41
Third Year—Men	52
Women	36
Fourth Year—Men	71
Women	42
Partials	160
	—687

SCHOOL OF COMMERCE.	
First Year—Men	83
Women	3
Second Year—Men	47
Women	3
Third Year—Men	46
Women	1
Partials	12
	—195

APPLIED SCIENCE	
First Year	124
Second Year	124
Third Year	129
Fourth Year	182
Fifth Year (Architecture)	23
Partials	3
	—585

MEDICINE.	
First Year—Men	88
Women	2
Second Year—Men	132
Women	2
Third Year—Men	97
Women	2
Fourth Year—Men	252
Women	1
Fifth Year—Men	135
Women	4
Diploma of Public Health	1
Partials	2
	—718

DEPARTMENT OF PHARMACY.	
For the Diploma of Pharmacy—Men	40
Women	2
	— 42

DENTISTRY.	
First Year	34
Second Year	38
Third Year	24
Fourth Year	35
	—131

LAW.	Undergraduates.
First Year—Men	24
Second Year—Men	28
Women	1
Third Year—Men	16
Women	3
Partials	2
	— 74

AGRICULTURE.	
First Year—Men	14
Second Year—Men	11
Third Year—Men	9
Women	1
Fourth Year—Men	21
Special Students	4
	— 60

MUSIC.	
Proceeding to the Degree of Mus. Bac.	6
Proceeding to the Diploma of Licentiate in Music	17
Partial Students	101
	—124

SCHOOL FOR SOCIAL WORKERS.	
Diploma Course	3
Certificate Course	9
Partial Students	10
	— 22

SCHOOL OF PHYSICAL EDUCATION.	
First Year	23
Second Year	21
Partial Students	1
	— 45

SCHOOL OF HOUSEHOLD SCIENCE	68

SCHOOL FOR GRADUATE NURSES.	
Certificate Course	12
Partial Students	45
	— 57

FACULTY OF GRADUATE STUDIES AND RESEARCH.		
M.A. Course	Men	20
	Women	5
M.Sc. "	Men	37
	Women	1
Ph.D. "	Men	20
	Women	4
LL.M. "	Men	3
M.S.A. "	Men	3
		— 93
		2,901
Less number whose names appear in more than one list		18
Total		2,883

In addition to the above 1,146 were enrolled in Extension Courses.

UNDERGRADUATE AND GRADUATE SOCIETIES.

No Club or Society which has not been approved by the Corporation is entitled to use the name of the University, or of the Royal Victoria College. Applications for such approval, accompanied by a copy of the constitution, should be addressed to the Registrar.

The Students' Council of McGill University.

OFFICERS 1923-24.

President—E. C. AMARON.
Secretary-Treas.—C. D. FRASER, Com. '22.

Executive Council.

C. COPE, Representative from Arts.
D. ANDERSON, Representative from Law.
R. A. SHATFORD, Representative from Science.
L. H. WEBSTER, Representative from Medicine.
J. H. HIGGINS, Representative from Dentistry.
J. PACKHAM, President McGill Union.
H. O'HAGEN, President "McGill Daily."

The McGill Union.

OFFICERS 1923–24.

President—J. PACKHAM.
Vice-President—L. LITTLE.
Secretary—B. LEACH.
Treasurer—C. D. FRASER.

"McGill Daily."

OFFICERS 1923–24.

President—H. O'HAGAN.
Editor-in-Chief—S. M. E. READ.
Managing Editor—R. F. OGILVY.
Sec.-Treas.—C. D. FRASER.
Adv. Mgr.—G. H. FLETCHER.

Undergraduates' Literary and Debating Society.

OFFICERS 1923–24.

I. U. D. L. Rep.—H. WELLS.
President—H. O'HAGAN.
Vice-President—J. M. PACKHAM.
SECRETARY—F. R. TERROUX.
Treasurer—E. A. FORSEY.

Arts Undergraduates' Society.

OFFICERS 1923–24.

President—CECIL T. TEAKLE.
Vice-President—R. U. FORTUNE.
Treasurer—H. P. TEAKLE.

R. V. C. Undergraduates' Society.

OFFICERS 1923–24.

President—PHYLLIS MURRAY.
Vice-President—JEAN GURD.
Sec.-Treasurer—FRANCES STOCKING.

Undergraduates' Society in Applied Science.

OFFICERS 1922–23.

Hon.-Pres.—DEAN ADAMS.
President—D. W. AMBRIDGE.
Vice-President—K. S. LEBARON.
Secretary—A. O. LESLIE.
Treasurer—D. WILLIAMSON.
Asst. Sec.-Treasurer—L. ALMOND.

Undergraduates' Society in Law.

OFFICERS 1923–24.

President—FRANK B. CHAUVIN.
Vice-President—FRED. T. COLLINS.
Secretary—To be elected.
Treasurer—MARCEL GABOURY.

Medical Undergraduates' Society.

OFFICERS 1923–24.

Hon. President—DR. E. ARCHIBALD.
Hon. Councillors—DR. J. R. FRASER.
DR. FRASER GURD.
President—W. F. EMMONS.
Vice-President—C. A. MACINTOSH.
Treasurer—G. B. DEMPSAY.
Secretary—E. A. MACNAUGHTON.
Asst. Secretary—B. D. ROBERTSON.
Case Reporter—C. L. POPE.

Philosophical Society.

OFFICERS 1923–24.

Hon. President—DR. WILLIAM CALDWELL.
Hon. Councillors—DR. WILLIAM D. TAIT.
DR. J. W. A. HICKSON.
M. M. DE SILVA.
President—OTTO KLINEBERG.
Vice-President—WILLIAM L. ROBERTSON.
Secretary—J. TAYLOR.
Treasurer—T. G. HUTTON.

Chemical Society.

OFFICERS 1923–24.

President—DR. A. B. MACALLUM.
Vice-President—PROF. N. N. EVANS.
Secretary-Treasurer—P. G. HIEBERT, M.Sc.

Mining and Metallurgical Society.

OFFICERS—1923–24.

Honorary Presidents—DR. J. B. PORTER.
DR. A. STANSFIELD.
President—L. H. TIMMINS.
Vice Presidents—A. K. MUIR.
G. W. SWEENY.
Sec.-Treasurer—To be elected.

Physical Society.

OFFICERS 1923–24.

President—DR. MAASS.
Vice-President—DR. D. A. KEYS.
Secretary—MISS A. MCPHERSON.

Commercial Society.

OFFICERS 1923–24.

President—JAMES M. PACKHAM.
Vice-President—T. F. MITCHELL.
Secretary—H. A. GALLEY.
Treasurer—E. R. WITMER.

Historical Club.

OFFICERS 1923–24.

Hon. President—DR. C. E. FRYER.
President—L. C. TOMBS.
Vice-President—G. T. LAFLEUR.
Treasurer—W. L. GOURLAY.
Secretary—A. R. STONE.

Electrical Club.

OFFICERS 1923–24.

Hon. President—DR. L. A. HERDT.
Hon. Vice-President—MR. WALLACE.
President—G. L. KEZAR.
Secretary—F. S. HOWES.
Treasurer—S. M. FINLAYSON.
Councillors—B. C. ROCHESTER. A. V. ARMSTRONG. O. S. CRAIK. A. G. DICKINSON. F. L. FOSTER.

Mechanical Club.

OFFICERS 1923–24.

Hon. President—A. R. ROBERTS.
President—G. M. DICK.
Vice-President—A. D. MCCALL.
Sec.-Treasurer—W. O. STEVENS.
2nd Year Representative—T. M. GODET.
1st Year Representative—To be elected.

Political Economy Club.

OFFICERS 1922–23.

Hon. President—DR. STEPHEN LEACOCK.
Hon. Vice-President—DR. J. C. HEMMEON.
President—C. BALLANTYNE.
Vice-President—R. K. JONES.
Secretary—C. W. WEBSTER.
Treasurer—H. R. HAMPSON.

Architectural Society.

OFFICERS 1923–24.

President—P. K. WILSON.
Vice-President—P. C. AMOS.
Secretary—F. CONSIGLIO.
Treasurer—A. W. WALLACE.
Representative—H. C. D. COOPER.

Cercle Français.

OFFICERS 1923–24.

Hon. President—PROF. R. DU ROURE.
President—M. GABOURY.
Vice-President—S. FRANKLIN.
Secretary—F. MILLINGTON.
Treasurer—G. LAFLEUR.

Société Française.

OFFICERS 1922–23.

Hon. President—MLLE. L. TOUREN.
President—ALICE ROY.
Vice-President—MARGARET ELLIOT.
Secretary-Treasurer—LUCIENNE DESBARATS.
Representatives—Fourth Year, FLORENCE BANFILL; Third Year, MARJORIE PENNINGTON; Second Year, DOROTHY LAW.

Société Littéraire Francaise.

President—PROF. RENE DU ROURE.

Delta Sigma Society.

OFFICERS 1923–24.

Hon. President—MRS. W. VAUGHAN.
Hon. Vice-President—MRS. E. IRWIN.
President—MISS E. MASSY BAYLEY.
Vice-President—MISS K. PERRIN.
Sec.-Treas.—I. NIXON.
Poster Manager—HELEN GILLIS.
Representatives—Fourth Year, V. ROSS; Third Year, E. EARDLEY; Second Year, W. GRIFFIN.

Student Christian Association of McGill University.

The active membership of this Association comprises members of McGill University and affiliated colleges who subscribe to a simple statement of purpose and who approve the objects of the Association.

The home of the Association is Strathcona Hall, which, in addition to affording ample accommodation for the work of the Association as a whole, provides residence for sixty-seven men.

Full particulars regarding the work of the Association are given in the annual Hand Book, and will also be supplied by the General Secretary.

OFFICERS 1923–24.

Hon. President—MR. W. M. BIRKS.
President—G. W. MITCHELL, Com. '24.
1st Vice-President—R. F. OGILVY, Sci. '24.
2nd Vice-President—DONALD STEWART, Sci. '25.
Rec. Secretary—C. T. TEAKLE, Arts '24.
Gen. Secretary—

The Student Christian Association of The Royal Victoria College.

OFFICERS 1923–24.

Hon. President—MRS. F. D. ADAMS.
Hon. Adviser—MISS DOROTHY CROSS.
President—KATHARINE DAWSON.
Vice-President—JEAN AFFLECK.
Secretary-Treasurer—ELSA HUTCHISON
Bible Study Convener—EVELYN EARDLEY.
Meetings Convener—ZERADA SLACK.
Conference Convener—EDITH BAKER.
Social Service Convener—MARGARET CAMERON.

Chess Club.

OFFICERS 1921–22.

President—R. DU BERGER, '23.
Vice-President—H. S. JORDAN, '21.
Secretary-Treasurer—D. COWAN, '23.
Executive—C. HUNTEN, '23.
Executive—H. JOHNSTON, '24.

Cosmopolitan Club.

OFFICERS 1921–22.

President—AMIR AMERIKHANIAN.

Old Scouts' Club.

OFFICERS 1923–24.

Hon. President—PROF. N. N. EVANS.
President—G. T. LAFLEUR.
Vice-President—A. T. MCINTYRE.
Secretary—G. KINGSTON.
Treasurer—H. AIKMAN.

Social Service Club.

No list of officers received.

Royal Victoria College Athletic Association.

OFFICERS 1923–24.

Hon. President—MISS LICHTENSTEIN.
Hon. Adviser—MISS E. M. CARTWRIGHT.
President—CAROL ROBERTSON.
Vice-President—MARJORIE MCWATTERS.
Secretary—ROBA DUNTON.
Treasurer—FRANCES SECORD.
Basket Ball Manager—EILEEN RUSSEL.
Tennis Manager—JEAN MATHEWSON.
Hockey Manager—RHODA GRANT.
Sports Manager—MARJORIE PENINGTON.

Athletic Association.

OFFICERS 1922–23.

President—D. B. FOSS, Sci. '23.
Vice-President—W. B. BREWER, Com. '23.
Secretary—C. D. FRASER, Com. '22.

Rugby Football Club.

OFFICERS 1922–23.

Hon. President—WALTER MOLSON, B.A.
Hon. Treasurer—DR. SULLIVAN.
President—T. R. MCLAGAN.
Vice-President—D. U. MCGREGOR.
Secretary—H. E. HUME.

Swimming Club.

OFFICERS 1923–24.

Hon. President—DR. SULLIVAN.
Hon. Vice-President—PROF. KELLY.
President—L. PARSONS.
Vice-President—W. D. MUNRO.
Secretary-Manager—C. M. ANSON.
Capt. Swimming Team—GEORGE VERNOT.
Capt. Polo Team—T. B. ROSS.
Reporter—W. MELLEN.

Indoor Baseball Club.

OFFICERS 1922–23.

President—O. L. MCCULLOCH, Com. '23.
Vice-President—E. WIGHT, Med. '25.
Captain—H. M. GABOURY.

Lawn Tennis Club.

OFFICERS 1923–24.

President—W. F. CROCKER.
Vice-President—P. L. DOUGLAS.
Secretary-Treasurer—DAVID R. MORRICE.

Harriers' Club.

OFFICERS 1923–24.

Hon. President—PROF. CARRUTHERS.
President—R. WIGGINS.
Vice-President—E. R. ALEXANDER.
Secretary-Treasurer—H. HALL.
Captain—T. KERR.

Ski and Snow-Shoe Club.

OFFICERS 1923–24.

Hon. President—LIEUT.-COL. H. MOLSON.
President—RALPH WHITTALL.
1st Vice-President—H. SMITH.
2nd Vice-President—GEORGE GRIMSON.
Secretary-Treasurer—A. E. STARKE.
Manager—E. JOHNSON.
Faculty Representatives—*Arts*—PHILIP WAITE.; *Science*—A. GRAVEL.; *Medicine*—T. BROWN.; *Law*—DUNCAN ANDERSON.

Hockey and Skating Club.

OFFICERS 1922–23.

Hon. President—W. T. STENSON.
President—M. H. DINEEN.
Vice-President—J. R. DEMPSEY.
Secretary and Manager—G. C. QUACKENBUSH.
Representatives—Medicine—F. G. SHAVER.; Science—ROBERT DAVIES.; Arts and Law—W. C. S. GAMBLE.; Dentistry—J. G. LYNCH.
Officers for 1923–24—To be elected.

Track Club.

OFFICERS 1923–24.

Hon. President—DR. R. E. POWELL.
Hon. Treasurer—W. ANTLIFFE.
Secretary and Manager—R. B. HENRY.
Asst. Manager—P. N. GROSS.

Boxing, Fencing and Wrestling Club.

OFFICERS 1922–23.

President—W. B. BREWER, Com. '23.
Vice-President—A. V. ARMSTRONG, Sci. '23.
Secretary and Manager—G. R. CURRIE, Com. '23.
Representatives—G. M. MORRIS, Med. '24.; E. R. IRVINE, Sci. '25.; C. H. AIKMAN, Arts '24.

Western Club of McGill University.

The Club has for its objects the furthering of the interests of McGill in the four Western Provinces and the helping of new students to McGill from these Provinces.

Students from Manitoba, Saskatchewan, Alberta, or British Columbia, coming to McGill for the first time, are requested to communicate with the Secretary of the Club, care The Union, McGill University, Montreal.

OFFICERS 1923–24.

Hon. President—SIR ARTHUR CURRIE.
President—J. G. CLELAND.
Vice-President—G. WARREN.
Secretary—A. J. WALKER.
Treasurer—M. S. LLOYD.
Representatives—Medicine—R. G. HUCKELL.; Science—R. A. SHATFORD.
Committee—British Columbia:—J. S. HELMCKEN.; Alberta:—E. M. COOPER.; Saskatchewan:—G. S. ELLIOT.; Manitoba:—A. H. SWEET.

Eastern Townships Club.

OFFICERS 1923–24

Hon. President—HON. W. G. MITCHELL, M.P.
President—C. H. CASWELL.
Vice-President—G. L. VANVLIET.
Secretary-Treasurer—C. ARMITAGE.

The Maritime Club of McGill University.

The object of this Club, which was formed by the amalgamation of the Nova Scotia and New Brunswick and Prince Edward Island clubs, is to promote, in every way possible, the best interests of students coming to McGill from the Maritime Provinces. Such students are urgently requested to communicate with the Secretary of the Club, who will be glad to render them all assistance in his power.

OFFICERS 1923–24.

Hon. President—DR. CYRUS MACMILLAN.
President—D. J. MACGILLIVRAY.
Vice-President—MISS D. TEED.
Secretary—R. K. JONES.
Treasurer—C. THOMPSON.

American Club.

OFFICERS 1923–24.

Hon. Presidents—PROF. FRANCIS E. LLOYD.; PROF. OERTEL.
President—D. E. TINKESS.
Vice-President—M. H. LEWIS.
Treasurer—A. K. KOFF.
Secretary—R. M. P. HAMILTON.

Newfoundland Club of McGill University.

OFFICERS 1923–24.

Hon. President—DR. W. H. HATCHER, Ph.D.
President—C. B. BLACKER, Med. '26.
Vice-President—W. BOYES, Arts '24.
Secretary—G. B. DARBY, Med. '27.
Treasurer—P. ROBERTS, Med. '26.
Reporter—D. H. ELLIS, Sci. '25.
Social Committee—C. R. BELL, Sci. '25.; J. S. WOODS, B.Sc.; C. R. GARCIN, Med. '26.

Graduates' Society of McGill University.

OFFICERS 1923–24.

President—H. M. LITTLE, B.A., M.D.
1st Vice-President—C. F. MARTIN, B.A., M.D.
2nd Vice-President—WILLIS CHIPMAN, B.A.Sc.
Hon. Secretary—PROF. N. N. EVANS.
Hon. Treasurer—PROF. H. M. LAMB.
Executive—A. P. S. GLASSCO, B.Sc.; J. G. ROSS, B.Sc.; C. B. KEENAN, M.D.; F. J. TEES, B.A., M.D.
Executive Secretary—W. DURIE MCLENNAN, B.Arch., McGill Univ., Montreal.

Alumnae Association of McGill University.

OFFICERS 1922–23.

President—MISS MAY IDLER, B.A.
1st Vice-President—MRS. A. D. FRY, B.A.
2nd Vice-President—MISS CATHERINE F. MACKENZIE, B.A.
3rd Vice-President—MISS A. MURIEL WILSON, B.A.
4th Vice-President—MRS. WALTER BROWN.
Cor. Secretary—MISS HELEN R. H. NICHOL, M.A., 110 Columbia Ave., Westmount.
Treasurer—MISS GWYNETH L. CRAIG.

District of Bedford McGill Graduates' Society.

OFFICERS 1923–24.

President—HON. MR. JUSTICE HACKETT.
Secretary-Treasurer—REV. ERNEST M. TAYLOR, M.A., Knowlton, P.Q.

McGill Alumni Association of Chicago.

OFFICERS 1923–24.

President—D. E. MCMILLAN, B.Sc.
Secretary—DR. NORMAN KERR, 25 East Washington St., Chicago, Ill.

Halifax Graduates' Society.

OFFICERS 1923–24.

President—C. H. WRIGHT, B.A.Sc.
Secretary—DR. W. L. MUIR, 245 Robie St., Halifax, N.S.

Hamilton Graduates' Society.

OFFICERS 1923–24.

President—DR. PRYSE PARK.
Secretary—DR. G. E. J. LANNIN, 150 James St. S., Hamilton, Ont.

Kootenay (B.C.) and Boundary Graduates' Society.

OFFICERS 1923–24.

President—DR. C. S. WILLIAMS.
Secretary—C. T. OUGHTRED, B.A., Trail, B.C.

Los Angeles Graduates' Society.

OFFICERS 1923–24.

President—G. P. RIXFORD, B.Sc.
Vice-President—J. D. MACKERRAS, B.A.Sc., Sierra Madre, Calif.
Secretary-Treasurer—MRS. S. WRIGHT JEWETT, B.A.,
2034 South-Western Ave., Los Angeles, Calif.

New England Graduates' Society.

OFFICERS 1923–24.

President—DR. E. C. NOBLE.
Secretary—DR. DEXTER, Taunton State Hospital, Taunton, Mass.

New York Graduates' Society.

OFFICERS 1923–24.

President—E. P. MATHEWSON, B.Sc., LL.D.
Secretary—CHARLES H. HIGGINS, D.V.S.
c/o Lederle Antitoxin Laboratories, 511–5th Ave., New York, N.Y.

Northern Alberta Graduates' Society.

OFFICERS 1923–24.

President—HON. A. C. RUTHERFORD, B.A., B.C.L.
Secretary—C. CARRUTHERS, B.A., 8319-101st Street, Edmonton, Alta.

Southern Alberta Graduates' Society.

OFFICERS 1923–24.

President—COL. GEORGE MCDONALD, M.D.
Secretary—S. K. PEARCE, B.Sc., 514 Burns Bldg., Calgary, Alta.

Ottawa Valley Graduates' Society.

OFFICERS 1923–24.

President—DR. H. B. SMALL.
Secretary—ROBERT C. BERRY, B.Sc., 54 The Driveway, Ottawa, Ont.

Prince Edward Island Graduates' Society.

OFFICERS 1923–24.

President—HON. JUSTICE WILLIAM S. STEWART, B.A., K.C.
Secretary—DR. W. J. P. MCMILLAN, 205 Kent St., Charlottetown, P.E.I.

Quebec Graduates' Society.

OFFICERS 1923–24.

President—BRIG.-GEN. J. E. LANDRY, B.C.L.
Secretary—O. L. BOULANGER, B.C.L., 132 St. Peter St., Quebec, Que.

St. Maurice Valley Graduates' Society.

OFFICERS 1923–24.

President H. S. REID, B.A.
Secretary—JOHN RYAN, Hotel St-Louis, Three-Rivers, Que.

St. John (N.B.) Graduates' Society.

OFFICERS 1923–24.

President—C. G. HARE, B.Sc.
Secretary—DR. DORIS MURRAY, B.A., 254 Douglas Avenue, St. John, N.B.

McGill Graduates' Society of Toronto.

OFFICERS 1923–24.

President—HON. MR. JUSTICE JAMES CRAIG.
Secretary—H. B. WHYTE, B.Sc., 74 Summerhill Ave., Toronto, Ont.

McGill Graduates' Society of Victoria.

OFFICERS 1923–24.

President—G. H. DAWSON, B.Sc.
Secretary—DR. G. C. KENNING, M.D., 305 Sayward Block, Victoria, B.C.

McGill Graduates' Society of Vancouver.

OFFICERS 1923–24.

President—DR. R. E. MCKECHNIE.
Secretary—NEVILLE SMITH, B.A., 543 Hastings St. W., Vancouver, B.C.

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